

December 15, 2014

RESS, EMAIL & COURIER

Ontario Energy Board
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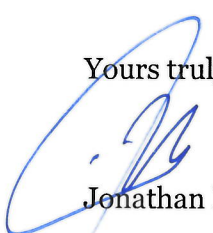
Attention: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

**Re: Windlectric Inc. - Application for Leave to Construct Transmission Facilities
(EB-2014-0300) - Applicant Interrogatory Responses**

We are counsel to Windlectric Inc. ("Windlectric") in respect of its application for leave to construct transmission facilities (EB-2014-0300). Further to Procedural Order #1 issued by the Board on November 26, 2014, please find enclosed the Applicant's responses to the interrogatories filed by Board staff and the Association to Protect Amherst Island ("APAI"). Please note that no other intervenors filed interrogatories in this proceeding. These materials have been filed on RESS and served on all intervenors.

Yours truly,



Jonathan Myers

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cc: Mr. A. Tsopelas, Windlectric Inc.

ONTARIO ENERGY BOARD STAFF - INTERROGATORY #1

References

Ref: Ex B/T1/S1/p.4

Preamble

The Renewable Energy Approval (REA) was expected in Fall 2014.

Questions / Requests

Has the Applicant received the REA? Please file the REA once it is issued by the Ministry of the Environment.

Response

No. The REA continues to be in the technical review phase. Windlectric will provide a copy of the REA once issued by the Ministry of the Environment.

ONTARIO ENERGY BOARD STAFF - INTERROGATORY #2

References

Ref: Ex E/T1/S1/p1

Preamble

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Questions / Requests

What is the status of the amendment to the land use agreement that was to be executed with the landowner in regards to the Project Substation?

Response

The draft amendment has been revised to address concerns raised by the landowner, but has not yet been executed.

ONTARIO ENERGY BOARD STAFF - INTERROGATORY #3

References

Ref: Ex E/T1/S1/p.2-3

Preamble

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Questions / Requests

What is the status of the road use agreement with Loyalist Township in relation to the Front Road crossing and the Bath Road/Highway 33 crossing?

Response

A draft road use agreement has been developed by Windlectric in consultation with Township staff and for several months has been before the Township Council for consideration, together with a community benefits agreement. The draft road use agreement only relates to the Front Road crossing on Amherst Island and not the Bath Road/Highway 33 crossing, which is a provincially-owned highway. As noted in Exhibit E, Tab 1, Schedule 1 at p. 3 an Encroachment Permit will be required from the Ministry of Transportation in respect of the Bath Road crossing.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #1

References

- a. Exh. B/Tab 1/Sch.1/Page4of5/Par.15
- b. Exh. B/Tab 1/Sch.1/Page 3 of 5/Par. 11

Preamble

The applicant states in Ref. a that construction will be completed in 8 to 12 months and that the proposed Transmission Facilities would be ready for service by approximately Spring 2016.

15. Subject to receipt of its REA, as well as other necessary permits and approvals, Windlectric plans to commence construction of the Proposed Transmission Facilities in the summer of 2015. Construction is expected to take approximately 8-12 months to complete. The Proposed Transmission Facilities would then be commissioned and would be ready for service by approximately Spring 2016.

Windlectric's Renewable Energy Application for the proposed Amherst Island Wind Project to the Ministry of the Environment and Climate Change recently set out a timeframe for construction of 18 to 24 months¹:

2.3 TIMING AND CONSTRUCTION PLANS

A description of the key construction activities are provided below in Table 2.3. Construction activities leading up to Project operations are anticipated to take approximately 18 -24 months.

Questions / Requests

- 1. Please confirm the timeline and milestones for construction for the proposed transmission facilities within the construction schedule for the AIWEP.
- 2. Please clarify why the most recent estimates differ.
- 3. Given the applicant's commitment, as set out in its application to the Ministry of Natural Resources and Forestry, to avoid construction between April and August to protect

nesting ground birds and given the requirements of the Cataraqui Region Conservation Authority to avoid construction during the fish spawning season in Lake Ontario, how will these requirements impact on the timeline for construction of the transmission facilities and the AIWEP period and completion of the project?

4. Will the Applicant provide evidence confirming that the Applicant will avoid construction during the times set out in Question 1.3?
5. Does the applicant's construction schedule include allowances for sharing Amherst Island's only ferry? We understand that the Applicant intends to use the Frontenac II until their permanent dock is in place. Ferry service is frequently interrupted by: breakdowns; high winds; ice and ice build-up at the docks; and emergency trips that alter the schedule. In addition, when the Frontenac II or the Wolfe Islander go into dry-dock; the Quinte Loyalist ferry replaces the Frontenac II. This smaller ferry holds only 18 vehicles as compared to 38 for the Frontenac II. In addition it has a limited capability to handle larger vehicles. Significant cooperation is needed on the part of Amherst Island residents to deal with fewer ferry spaces. Line-ups are often long, especially in the summer when the population almost doubles.
6. Is the applicant aware that the Quinte Loyalist will replace the Frontenac II for 3-4 months starting in April of 2015? What impact will this have on the transmission project schedule?
7. Provide a list of all outstanding approvals and permits needed to complete the transmission Project, indicating the timeline to obtain each permit and each approval.
8. Provide information/correspondence confirming that Windlectric is in the late stages of negotiating a land agreement with Loyalist Township in respect of the road crossing on Amherst Island.
9. Given that the Windlectric's REA has not been approved and many other permits and approvals are outstanding, how does Windlectric propose to achieve its commercial operation date and at the same time comply with all conditions of approval of the REA and other permits and approvals?
10. What specific actions is Windlectric proposing to take to expedite construction completion while at the same time complying with all approvals, requirements and the municipal noise bylaw for construction?
11. Windlectric has entered into a FIT contract with the Ontario Power Authority for the proposed Amherst Island Wind Project. What is the commercial operation date set out in

that contract? How many days extension to the commercial operation date (COD) has Windlectric sought due to Force Majeure?

12. How many days extension due to Force Majeure have been granted to Windlectric Inc., by the Ontario Power Authority?
13. Has the Ontario Power Authority publicly indicated that no contract extensions to FIT Contracts will be permitted?

Response

1. Confirmed.
2. The two timelines indicated in the preamble differ because the timelines described in the application relate only to the proposed transmission project while the timelines described in the Renewable Energy Approval application relate to the Amherst Island Wind Project, including the generating facilities, collector system and transmission facilities. The preamble references section 2.3 from the Applicant's Construction Plan Report as revised December 2013. Table 2.3 of that report, which follows immediately after the quote provided in the above preamble, indicates the following timelines of relevance to this application: installation of submarine cable (2-4 weeks), installation of collector lines and transmission line (6-9 mos), installation of substation (4-7 mos), installation of switching station (2-5 mos). The time needed for installation of the collector lines is not relevant to the transmission project that is the subject of this application. Some of the above activities will be undertaken simultaneously such that the transmission project can be completed within the estimated period of 8-12 months. The 18-24 months referenced in the preamble accounts for additional activities, including but not limited to construction of access roads, staging areas and docks, installation of turbine foundations, erection of turbines and turbine towers, reclamation of temporary work areas and project testing.
3. These factors will not impact the timeline for construction of the transmission facilities because they have been taken into consideration in developing the estimated timeline.
4. The Applicant does not intend to file further evidence on this issue, which is not relevant to the Board's jurisdiction in this proceeding. The Applicant anticipates that leave to construct will be granted subject to the condition that it obtain and comply with all other approvals that are required to construct the transmission facilities, including for example the Applicant's Renewable Energy Approval.

5. The Applicant does not expect to rely upon Amherst Island's ferry or its docks for purposes of constructing the proposed transmission facilities. The Amherst Island ferry and dock will only be used as needed by the Applicant to construct its own dock on the island. Access to the Amherst Island ferry and dock will be negotiated with the owners and operators of the ferry and dock if required. It is expected that this will be completed prior to commencing construction of the proposed transmission facilities.
6. See response to APAI Interrogatory # 1.5, above.
7. The following is a list of the permits and approvals that are or which may be needed for purposes of constructing the proposed transmission facilities:

Government	Authority	Potentially Required Permit or Approval	Estimated Timing
Federal	Fisheries and Oceans Canada	Completion of self-assessment process for potential fisheries impacts in connection with crossing of one water body	Request for review submitted October 8, 2014. Response expected by January 2015.
Federal	Transport Canada	Navigational Clearances under the <i>Navigable Waters Protection Act</i> in connection with the submarine segment of the transmission line.	Notice of Works submitted in early September, 2014.
Provincial	Ministry of the Environment	Renewable Energy Approval	Expected in Q 1 2015.
Provincial	Ministry of Natural Resources and Forestry	Water Crossings Work Permit under O. Reg. 453/96 of the <i>Lakes and Rivers Improvement Act</i>	Application for Work Permit in respect of submarine segment of transmission line expected to be submitted in Q1 2015 for approval in Q2 2015.
Provincial	Ministry of Natural Resources and Forestry	Disposition of Crown Land Authorization	To be sought upon receipt of Work Permit from MNRF, with some overlap between the two review processes. As such, it is estimated that the tenure process

Government	Authority	Potentially Required Permit or Approval	Estimated Timing
			would commence in mid-2015 and be concluded within approximately 6 months.
Provincial	Ministry of Natural Resources and Forestry	Species at Risk Permit under the <i>Endangered Species Act</i> (if designated species habitat is impacted)	Expected in Q1 2015.
Provincial	Cataraqui Region Conservation Authority	Permit for water crossings and works within floodplain under <i>Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation</i>	Application expected to be submitted in Q1 2015, with approval expected within approximately 30 days.
Provincial	Ministry of Tourism, Culture and Sport	Archeological and Cultural Heritage Clearances under the <i>Heritage Act</i>	Confirmation letter received in April 2014.
Provincial	Ministry of Transportation	Compliance with the <i>Highway Traffic Act</i> and <i>Road Safety Regulations</i> - Highway Entrance Permit, Transportation Permits (e.g. Oversize, Overweight Permit or Special Vehicle Configuration Permit), Crossing Permits, Encroachment Permit	Applications to be submitted so as to receive permits in approximately mid-2015.
Provincial	Ontario Energy Board	Notice of Proposal under Section 81 of the <i>Ontario Energy Board Act</i>	To be provided concurrently with generation licence application, upon receiving notice to proceed from the OPA. Maximum 2 months to receive letter of no review.
Provincial	Ministry of Labour	Notice of Project prior to commencing construction (to be	Will be obtained prior to start of construction

Government	Authority	Potentially Required Permit or Approval	Estimated Timing
		obtained by contractor)	and is expected in mid-2015
Provincial	Hydro One Networks Inc.	Transmission Connection Agreement	Expected in Q1/Q2 2015
Provincial	Independent Electricity System Operator	Connection Approval	Expected prior to commissioning, following completion of IESO participant authorization, facility and meter registration processes.
Provincial	Electrical Safety Authority	Certificate of Inspection	To be obtained upon completion of construction, prior to energization of the transmission facilities. See response to APAI Interrogatory #5.7.
Municipal	Loyalist Township	Building Permits, Entrance Permits, Road Use Agreement	See response to Board Staff #3. It is expected that the RUA will be finalized following issuance of the REA. Applications for building permits and entrance permits, as may be needed for the transmission project, will be applied for so as to receive the necessary permits by mid-2015.

8. The Applicant does not require a land agreement with Loyalist Township in respect of the road crossing. The Applicant has a statutory right under section 41 of the *Electricity Act* to construct or install structures and equipment for its transmission system over, under or on any public street or highway. See also response to Board Staff #3.

9. This question is not relevant to the present proceeding. The Applicant anticipates that leave to construct will be granted subject the condition that it obtains and complies with all other approvals and authorizations needed to construct and operate the proposed transmission facilities.
10. The Applicant does not anticipate having to implement any special measures to expedite construction of the proposed transmission facilities beyond its normal construction processes. The Applicant will comply with all approvals, requirements and municipal noise bylaw requirements to the extent they are applicable to the construction of the proposed transmission facilities.
11. This question is not relevant to the proceeding as it has no bearing on any aspect of the public interest test to be applied by the Board pursuant to section 96(2) of the *Ontario Energy Board Act*. Nevertheless, the Applicant notes that the pre-filed evidence at Exhibit B, Tab 2, Schedule 1, p. 3 states that the Applicant was awarded a contract from the Ontario Power Authority (the “OPA”) under the Feed-in Tariff (“FIT”) program in February 2011. Under the standard terms of the FIT Contract, the Milestone Date for Commercial Operation for a wind generation facility is 3 years from the date of the contract. This date could be extended if and to the extent that the Applicant experiences a Force Majeure event and the OPA accepts such Force Majeure claim. In addition, under the FIT Contract a supplier may achieve Commercial Operation after the Milestone Date for Commercial Operation (as such date has been modified by any events of force majeure), but there would be financial consequences to the supplier. Specifically, if the supplier cannot achieve Commercial Operation by the Milestone Date for Commercial Operation, the 20 year term of the Agreement will nevertheless commence on such date, with the effect being that the period during which the supplier will be able to operate and receive payments under the FIT Contract will be 20 years less the difference between the Milestone Date for Commercial Operation and the date Commercial Operation is actually achieved. In these circumstances, the supplier would have the option of making a payment to the OPA in order to effectively restore the term to the full 20-years upon achieving Commercial Operation. Because of this, the supplier has a strong incentive to achieve Commercial Operation by no later than its Milestone Date for Commercial Operation.
12. This question is not relevant to the proceeding as it has no bearing on any aspect of the public interest test to be applied by the Board pursuant to section 96(2) of the *Ontario Energy Board Act*.
13. This question is not relevant to the proceeding as it has no bearing on any aspect of the public interest test to be applied by the Board pursuant to section 96(2) of the *Ontario Energy Board Act*. The Applicant is nevertheless not aware of any such statement.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #2

References

- a. Exh.B/Tab 1/Sch. 1/p.3 of 5/para.12&13
- b. Exh.F/Tab 1/Sch. 1,2,&3
- c. Exh.G/Tab 1/Sch. 1&2

Preamble

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Questions / Requests

1. Do the SIA and the CIA documents need to be updated. If so what amendments are required?
2. Will the Applicant please provide a copy of Windlectric's license to generate. If no license is available, indicate if and when Windlectric plans to apply for this license?
3. Will Windlectric provide the minutes or notes from any meetings or discussions held with the IESO in regards to integration of the output of the Windlectric transmission project?
4. Will Windlectric provide the minutes or notes from meetings or discussions with Hydro One Networks in regards to the connection of the proposed project to the existing transmission line on the mainland?
5. One of the objectives of the OBE in the Ontario Energy Board Act is as follows: To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry. How will approving this transmission project contribute to this objective?

6. Provide information of the anticipated price that will be paid to Windlectric per MWh of generated electricity including projected cost of living increases over the lifespan of this project.
7. Evidence suggests that the costs of developing and operating the proposed AIWEP are extremely high for the Project owing to the fact that it is on an Island. Please provide evidence demonstrating that the proposed Windlectric Transmission Project is cost effective relative to other projects, is efficient, and contributes to the maintenance of a financially viable electricity industry and therefore is in the public interest.
8. Will permitting the connection of this development to the grid, add to the high costs borne by the electricity consumer and provincial taxpayer?
9. How is it in the public interest for the OEB to grant approval for this connection, which will make the burden on the electricity worse?

Response

1. No.
2. As required by the Ontario Energy Board, the Applicant will apply for an electricity generation licence subsequent to receiving notice to proceed from the Ontario Power Authority.
3. The Applicant does not intend to provide any such minutes or notes. The Applicant has followed the IESO's connection assessment process to date and has obtained a System Impact Assessment from the IESO, a copy of which is included in Exhibit F, Tab 1, Schedule 3 of the pre-filed evidence. The Applicant further intends to meet the IESO's requirements for market entry and to comply with the relevant provisions of the Market Rules. Any minutes or notes that may be available would not likely be of additional value to the Board in this proceeding given the inclusion in the pre-filed evidence of the IESO's final System Impact Assessment report.
4. The Applicant does not intend to provide any such minutes or notes. The Applicant has followed Hydro One's connection assessment process to date and has obtained a Customer Impact Assessment from Hydro One, a copy of which is included in Exhibit G, Tab 1, Schedule 2 of the pre-filed evidence. The Applicant is progressing through Hydro One's connection process and will meet all requirements thereunder. Any minutes or notes that may be available would not likely be of additional value to the Board in this

proceeding given the inclusion in the pre-filed evidence of Hydro One's final Customer Impact Assessment report.

5. This question is not relevant. As described in the Notice of Application in this proceeding and reiterated in Procedural Order No. 1, the test to be applied by the Board on an application under section 92 of the *Ontario Energy Board Act* for leave to construct is described in section 96(2). The specific objectives of the Board under section 96(2) supersede the general objectives described in section 1 of the Act.
6. The price that will be paid per MWh of electricity generated by the Amherst Island Wind project is not relevant to the present proceeding.
7. It is not clear what "evidence" the APAI refers to in its question. In any event, this question is not relevant to the present proceeding. See response to APAI Interrogatory #2.5, above.
8. The application that is under consideration in the present proceeding is for leave to construct the proposed transmission facilities. The Applicant does not require permission from the Ontario Energy Board to connect its wind project or its proposed transmission facilities to the provincial transmission system. In accordance with section 26(1) of the *Electricity Act*, licensed transmitters such as Hydro One are obligated to provide non-discriminatory access to their transmission systems. Moreover, as noted in the Application, the costs of the proposed transmission facilities will be borne entirely by the Applicant and will not impact transmission rates in Ontario.
9. See response to APAI Interrogatory #2.8, above, regarding the nature of the application that is before the Board and the response to APAI Interrogatory #2.5, above, regarding the nature of the test that is to be applied by the Board in this proceeding. It is not clear what is meant by "make the burden on the electricity worse."

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #3

References

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Preamble

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Questions / Requests

1. What will the cumulative effect of the energy projects on Amherst Island and the mainland to the north, including the AIWEP; the proposed TransCanada Napanee Generating Station; plans for the existing Lennox Generating Station; and the various solar energy developments on the transmission facilities in terms of timing of each of the projects. Should the Minister act on a request by the APAI to consider the cumulative effects, what impact would this have on the transmission project?

Response

1. If the question refers to the cumulative effects on Hydro One's transmission system or on the IESO-controlled grid, we note that the Customer Impact Assessment and System Impact Assessment each consider and assess the potential impacts of connecting the proposed transmission facilities on other customers that are connected to or expected to be connected to Hydro One's transmission system and to the IESO grid. For example, p. 22 of the System Impact Assessment Report at Exhibit F, Tab 1, Schedule 3 identifies all generation facilities that the IESO assumed would be in-service at the time the Applicant connects its proposed facilities to the grid. Similarly, this process would be followed for other generation projects expected to be in-service later than the AIWEP. Page 15 of the Customer Impact Assessment Report at Exhibit G, Tab 1, Schedule 2 indicates that Hydro One adopted the same assumptions regarding facilities in service.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #4

References

a. Exh.B/Tab 1/Sch.1/p.4 of 5/para.16

Preamble

The Applicant states: *The cost of the proposed transmission facilities will be borne by the Applicant.* (ref.a.)

Questions / Requests

1. Are there any costs associated with the transmission facilities that will be covered by the taxpayers and consumers?
2. How will the costs of decommissioning the transmission facilities be paid for?
3. Will Windlectric assure the OEB, the provincial government and Loyalist Township that it will decommission the transmission project by posting a letter of credit in an amount sufficient to cover the complete cost of decommissioning the transmission facilities, with the ability of Loyalist Township to draw on the Letter of Credit should the project be sold or terminated for any reason?

Response

1. No.
2. Decommissioning costs will be the responsibility of the Applicant, or the owner of the transmission facilities if the Applicant is not the owner of the facilities at such time that the facilities require decommissioning.
3. No, the Applicant will not provide a letter of credit as suggested by the APAI. The Applicant anticipates that it will have obligations in respect of decommissioning as part of its Renewable Energy Approval that will be issued by the Ministry of the

Environment. In addition, the Applicant has obligations in respect of decommissioning as with each of the landowners with whom it has entered into a land agreement.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #5

References

a. Exh.C /Tab 1/Schedule 1/ Page 3 of 6

Preamble

Windlectric states: “The overhead segment of the transmission line on the island will be constructed using a monopole type design of approximately 11 **steel** structures”. (Ref. a)

The Construction Plan Report dated April 2013 and revised December 2013 prepared by Stantec and submitted by Windlectric to the Ministry of the Environment and Climate Change in support of its Renewable Energy Application describes the transmission line on Amherst Island with wooden “H” poles or alternatively cable buried underground.

Modification Report #1 submitted to the Ministry of the Environment and Climate Change suggests that 50 ft. above ground poles. Now, ref. b specifies steel poles up to 80 ft. will be used. This change is not reflected in the updated Construction Plan Report³. The public has not had an opportunity to comment on the design and construction of the transmission facilities as these plans are only now being finalized.

Diagrams do not depict the relationship of the transmission project the, the community centre, the ferry dock, the village of Stella, heritage landscapes and existing electrical infrastructure and AIWEP components. It appears from the Applicant’s diagrams that the transmission project is in an area where no one lives when in fact this is the most populated part of Amherst Island. The Island has one village, one school, one community centre, one radio station and one ferry all located on adjacent property to just east of the transmission project. Front Rd. is the most critical road on Amherst Island from a resident perspective. The western boundary of the village of Stella is at the Island’s elementary school, which is .5 km from the proposed transmission line and approximately 950 metres from the substation.

Questions / Requests

1. Confirm, given the discrepancy between the descriptions in the submission to MOECC and to the Ontario Energy Board, what is proposed for the construction of the

transmission line on Amherst Island and how Amherst Island residents can input to the plans for the transmission facilities.

2. Explain the rationale for using metal monopoles rather than H poles specified in earlier Stantec reports.
3. Will Windlectric provide a landscape diagram to scale, of the proposed above-ground transmission facilities, indicating the specific placement of the monopoles, in relation to the Island community and elementary school.
4. Windlectric's Application for Leave to Construct does not refer or depict the electrical and communications infrastructure that serves Amherst Island. The communications infrastructure and the community radio station are also not shown on the drawings. Similarly the Island's only helipad is absent from the maps and drawings provided by Windlectric. Will the Applicant please provide maps with this infrastructure depicted?
5. Will Windlectric provide a summary of required and actual setbacks from the transmission corridor, substation, and transformer station, to adjacent landowners, the Amherst Island Public School and Community Centre and heritage landscapes and built heritage resources, identified in the REA documents?
6. What is your advice to landowners who have leased their lands for transmission facilities regarding a safe distance for farming the impacted lands?
7. Who at the Electricity Safety Association will be responsible for reviewing this installation?
8. Will the Applicant provide details of any measures that will be taken to prevent electrification of the surrounding lands in the event of a failure of the transmission system?
9. Will the Applicant provide details of Windlectric's plans and procedures for dealing with complaints related to the transmission facilities?
10. Does the applicant's Emergency Response Plan include a plan for dealing with a failure in the transmission line, substation and transformer? If not, and the applicant has not yet prepared a detailed Emergency Plan, please provide information and documents dealing with this risk.
11. We understand that the Applicant will have unrestricted access to Island roads. The location of the transmission facilities, the project dock and construction constitute a worst-case scenario from the perspective of people who live on Amherst Island. Please

provide information on proposed public access/safety on the roads during construction. What alternate access routes are proposed? How will the Applicant share the existing Island ferry?

12. How does Windlectric propose to protect groundwater and residents' water supply from the construction and installation of the proposed hydro transformer and poles on the Island given its fractured limestone geology?

Response

1. The transmission facilities that the Applicant proposes to construct are as described in its application to the Ontario Energy Board for leave to construct. Interested members of the community have had formal opportunities to comment on the transmission project through the REA process. In addition, in the present proceeding the Applicant published and served copies of its Notice of Application in accordance with the Ontario Energy Board's requirements. That Notice provided interested members of the community with opportunities to participate in the proceeding as an observer or intervenor or through the filing of letters of comment.

With respect to the "discrepancy" referenced by APAI, the Applicant notes that the REA documents referenced the "potential" use of H-frame structures for the transmission line on Amherst Island as such a design was considered to have the greatest potential impact from an environmental perspective due to the increased number of footings that would be required. Figures provided in REA Modification Report #1 showed conceptual drawings of mono-pole structures and indicated the height of one of the poles as approximately 50 ft to the highest conductor, with an undefined height above this for the grounding wire. Further refinement of the design in preparation of the present application resulted in the design height being finalized as 70 ft to the top of the pole or about 60 ft to the highest conductor so as to provide adequate clearance along Front Road and for landowners to safely continue agricultural operations on their properties unhindered.

2. The decision to use the monopole structure rather than an "H" frame was taken to reduce the number of footings required so as to minimize the impact on the relevant landowners' use of their properties. See response to APAI Interrogatory #5.1, above.
3. An illustration showing the requested elements is attached hereto as **Appendix 'A'**.
4. See response to APAI Interrogatory #5.3, above. In respect of the electrical infrastructure that serves the Island, please see the Existing Utilities Map - Island Utilities at Exhibit C,

Tab 2, Schedule 1, Figure 5(a). In respect of the request for the map to show the Island's radio communications infrastructure, please see **Appendix 'A'**.

5. CSA C22.3 No.1-2010 Table 9 establishes minimum design clearance requirements for supply wires and conductors to adjacent buildings. For the proposed 115 kV transmission line, the minimum required clearance is 2.0 m plus 1 cm for each kV above 22 kV, which results in a minimum required clearance of approximately 3.0 m. This clearance is to be applied after accounting for swing of the line due to wind.

With respect to the actual setbacks from the proposed transmission facilities to the referenced infrastructure, we note that the school/community centre will be 1009 m from the substation and 612 m from the closest point along the overhead transmission line. The cultural heritage landscape closest to the proposed facilities is the Ferry Landscape, which is 618 m from the closest point on the overhead transmission line. The built heritage resource closest to the proposed facilities is located at 3475 Concession Road 2, which is over 1.4 km from the closest point on the proposed transmission facilities. The Protected Property closest to the proposed facilities is the Trinity United Church, which is approximately 1 km from the closest point on the overhead transmission line.

6. This question is not relevant to the proceeding. Nevertheless, the Applicant notes that landowners will be able to farm right up to the bases of transmission poles on their properties and that the transmission lines will be of a sufficient height to allow for farming activities to be carried out safely underneath.
7. Approval of the final design will be conducted by the Electrical Safety Authority (the "ESA"). The ESA is an "Authority" with powers that have been established by legislation. It is not an "Association" as described in the question posed by APAI. The ESA is designated as the Ontario Authority responsible for electrical safety by Ontario Regulation 89/99. The Applicant's final design plans will be submitted to the Plan Review section of the ESA, which conducts a general review and audit of the plans in accordance with Rule 2-010 of the Ontario Electrical Safety Code. The ESA will appoint a field inspector to the project. The field inspector will follow the work to completion and, once satisfied with the installation of the work, will issue a Certificate of Inspection on behalf of the ESA.
8. The transmission facilities are designed with, and will be constructed with, all protections required by the Transmission System Code, which in turn requires conformance with the applicable requirements of the Ontario Electrical Safety Authority, applicable standards such as those of the Canadian Standards Association, and certain technical requirements as set out directly in the Transmission System Code. This includes the use of impedance type relays which will react instantaneously upon an event, such as a break in the line, to

isolate the line and prevent “electrification of the earth”. Utility standard grounding and bonding designs will mitigate any secondary issues.

9. The Applicant will have a complaint response protocol under its Renewable Energy Approval which will cover complaints related to the entire Amherst Island Wind Project, including the proposed transmission facilities.
10. The Applicant’s Emergency Response Plan will include a plan for dealing with emergencies relating to the transmission facilities and will apply industry best practices. The Plan will be prepared in advance of the facilities being energized. As noted in Exhibit D, Tab 1, Schedule 1, the emergency management and response plan will be consistent with the standard form of emergency plan used at all Algonquin Power related facilities, with modifications as needed to address site-specific features.
11. With respect to the ferry, please see response to APAI Interrogatory #1.5, above. With respect to the Amherst Island roads, the Applicant expects to have only a minimal impact on traffic during construction of the proposed transmission facilities. The transmission facilities do not run along any roads and only have one road crossing on the island. Poles will all be on private property and the substation will be located on private property. As such, nearly all construction activities in connection with the transmission facilities will take place on private properties. Stringing the transmission line across the one road crossing on Amherst Island will not have a significant impact on traffic; it will be scheduled so as to minimize impacts and the community will be notified in advance of any temporary road closures. In addition, the Applicant expects that the Road Use Agreement and Municipal bylaws will apply so as to further address community concerns with respect to the use of roads.
12. This question is not relevant to the present proceeding. It refers to environmental and/or health aspects that are beyond the scope of the Ontario Energy Board’s jurisdiction in this proceeding.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #6

References

- a. Exh. C/Tab 2/Sch. 1/Figure 3b
- b. Exh. B/Tab 2/Sch. 1/Page5 of 9/Line 13
- c. Exhibit B Tab 2 Schedule 1 Page 5 of 9 section 5

Preamble

The Application for Leave to Construct notes that Windlectric is “well advanced in its efforts to negotiate a roads use agreement with Loyalist Township which will address the road crossing on Amherst Island”.

Questions / Requests

1. Please provide evidence that this assertion is true. The Township’s position as set out In a report approved by Loyalist Township Council on April 2, 2013, Murray J Beckel MCIP, Director of Planning and Development for Loyalist Township concerning the Municipal Consultation Form pointed out the many deficiencies and omissions in the Windlectric Inc. proposal and advised that the “consultants’ reports lack detail and an approval of the project is premature until the full scope of the project including an appropriate level of detail is supplied enabling a proper assessment of impact on municipal infrastructure, the natural environment, cultural heritage, and land use compatibility.”
2. What is the status of negotiations with the County of Lennox and Addington concerning Roads Use given the County’s advice to Stantec Consulting Ltd in a letter dated July 23, 2013 that “The County of Lennox & Addington concurs with Loyalist Township that the various studies lack the level of detail needed to adequately assess potential impacts on municipal infrastructure (sic) Further, the County agrees with Loyalist Township that a renewable energy approval for this project is premature until such time that further details are provided that adequately address all concerns raised.”

Response

1. See response to Board Staff #3. The report to which the question refers relates to the Renewable Energy Approval application process and indicates that Township staff were of the view in March 2013 that the draft reports that had been provided at that time in support of Windlectric's Renewable Energy Approval application did not provide sufficient detail in staff's view for the Township to support the granting of a renewable energy approval for the wind farm project. The referenced report has not been filed as evidence and it is not relevant to the current status of the Applicant's efforts to negotiate a road use agreement with Loyalist Township.
2. See response to Board Staff #3. The letter to which the question refers relates to the Renewable Energy Approval application process and is not relevant either to the question that has been asked or to the present proceeding. Moreover, no portion of the proposed transmission facilities crosses or runs along or in any County roads.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #7

References

- a. Exh. E/ Tab 1/ Sch. 1/Page 1 of 12/ Section 1(b)
- b. Exh.B/Tab 1/Sch.1/Page 3 of 5/para. 10
- c. Exh. B/Tab 2/Sch.1/p.4 of 9/line5

Preamble

Windlectric presented three submarine cable routes, and three dock locations, in its Renewable Energy Application to the Ministry of the Environment and Climate Change and advised that all of these options were still under consideration in July 2014. It is unclear whether the plans for the transmission facilities as set out in the OEB application are final, subject to input from the OEB, or if changes are still possible.

The Applicant states: “The location of the Project Substation was based on its proximity to the wind turbines associated with the Generation Project, which minimizes losses on the collection system, as well as to facilitate a relatively short path to the mainland interconnection point”.

Questions / Requests

- 1. Are the plans for the transmission facilities final, subject to input from the OEB and IESO in the present hearing? If not please advise as to the remaining steps to complete the plans.
- 2. Were community interests considered in the decision to locate the Island transmission facilities? If not when and in what manner will these be considered?
- 3. Were alternative locations and routes for the proposed 115 kV transmission line, substation, and transformer on Amherst Island considered?
- 4. Windlectric agreed to bury the transmission line on the mainland following a request by a participating landlord but failed to accede to community requests to bury the 115 kV

transmission line on the Island. Will participating landowners on Amherst Island have an opportunity in negotiating their agreements, to request an underground transmission line?

5. Has Windlectric considered the impact of the proposed transformer station on Amherst Island and the transmission line on the Little family, known in Windlectric's REA application as Receptor 166? (Ref. b) The Little family home is approximately 390 metres from the proposed substation.

Response

1. Yes, subject to unforeseen circumstances, the plans outlined in the pre-filed evidence are final. If any changes to the plans were required during the course of the proceeding (which is not the case), it would require an update to the evidence that would be subject to further consideration. Any changes to the transmission project subsequent to being granted leave to construct would be subject to the Ontario Energy Board's requirements for project modifications, as set out in the relevant filing requirements. Those requirements are to notify the Board of any proposed modifications to the approved transmission route. The Board will then decide if such modifications are of sufficient significance to warrant examination by the Board and affected parties.
2. Yes. For example, the proposed routing for the transmission line on the island was subject to public comment and consultation processes through the Renewable Energy Approval process. The Applicant has also sought to place as much of the transmission line on private properties with landowners that are willing hosts, rather than along public roads or other public lands, and to minimize the overall length of the proposed transmission line.
3. The Applicant considered the possibility of a 34.5 kV submarine cable which would have avoided the need to construct a substation on the island. This alternative was rejected due to its comparatively high cost and the significant line losses that would result from such a configuration. The Applicant also considered the possibility of interconnecting at Lennox TS, but this would have required a 230 kV interconnection, which was deemed to be too costly relative to the size of the generation project. In addition to having more expensive components, a 230 kV line to Lennox TS would require the substation to be relocated towards the west end of the island, which would in turn require land rights to be secured with additional landowners. The 230 kV alternative was also considered at a time when the planned generation facility was expected to be larger. A 230 kV line would not be appropriately sized for the current scale of the generation project. The Applicant also had to take into consideration the location of other submerged utilities in determining the routing for the submarine component of the proposed transmission

facilities. The proposed routing avoids existing Hydro One submarine distribution lines and Bell Canada telecommunications facilities.

4. It would have been open to participating landowners to raise any concerns with the planned overhead design and/or to express any views they might have had with respect to underground installation of the transmission facilities on their property.

With respect to the Applicant's decision to install the portion of the transmission line on the mainland underground, we note that the mainland portion of the transmission line is considerably shorter than the portion that will be situated on Amherst Island. Moreover, the Applicant agreed to install the transmission facilities on the mainland because that segment of the line crosses a public park area, crosses a provincial highway, and due to the importance to that landowner of minimizing the impact on potential future redevelopment of its large industrial property.

We further note that, relative to underground transmission lines, overhead lines have lower line losses, higher power quality, longer life expectancy and are easier to inspect, maintain and repair. Moreover, it is important to recognize that the underground installation of high voltage transmission lines is, for safety reasons, not undertaken in the same way as underground installation of low voltage distribution or collection lines. In particular, whereas low voltage lines are buried directly in the earth, high voltage lines are typically installed within concrete encasements or with substantial mechanical protection, which requires significant excavation and construction activity along the length of the line.

In addition, we note that Hydro One, which is the largest licensed transmitter in Ontario, has a policy of building all high-voltage transmission lines above ground wherever possible and of installing such lines underground only where there are technical constraints that prevent overhead construction or if in a particular area the cost of overhead construction is not practical (See June 17, 2010 Application in EB-2009-0425, p. 9). It is also instructive to consider that as at December 31, 2013 Hydro One owned and operated approximately 29,000 circuit kilometers of high-voltage transmission lines and that all of these lines are overhead with the exception of just 282 circuit kilometers, which consist of underground lines in urban areas. This represents less than 1% of Hydro One's transmission system.

Finally, we note the Board's conclusion in its July 5, 2013 Decision and Order in EB-2012-0365, where it found the issue of burying transmission lines "is not a matter that falls under the jurisdiction of the Board unless it engages questions of reliability."

5. Issues relating to the proximity of the project substation to a particular residence are beyond the scope of the Board's jurisdiction in this proceeding. Nevertheless, the

Applicant notes that consideration for the referenced residence was a factor in determining that, within the project substation, the transformer will be surrounded by noise barriers on three sides.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #8

References

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Preamble

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Questions / Requests

1. What provisions have been made by Windlectric to protect the Island's single source of electricity, its communications infrastructure and the community radio station licensed by the CRTC located in close proximity to the proposed transmission line at 5830 Front Road?
2. The submarine cable that provides power to the Island is not identified in the Application for Leave to Construct. How can the community be assured that its electrical power will not be interrupted or affected by the transmission project?
3. What alternatives did Windlectric consider to provide power to the Island isolated from the mainland in Lake Ontario?
4. Provide details of any safety or backup system in the event of a failure in the transmission line.
5. The quality of electricity supply to the Island is considered somewhat unstable with frequent voltage fluctuations and frequent brief power interruptions. As the IWT generators are also consumers of electricity during low wind conditions, will the Windlectric project consume electrical power from the existing Hydro One network and become an additional burden to that system. Please provide projections of the net power demands of an IWT system.
6. What provisions are proposed to provide emergency back---up power to the entire Island in the event that the proposed Amherst Island Wind Project results in a power outage? Note that the Island is isolated and vulnerable. It has no medical services, no doctor, no

ambulance, no water supply and the average response time for an ambulance is 33 minutes by ferry with a similar time for the return trip.

7. Has Windlectric received approval from the Ontario Ministry of Health and ORNGE to locate project infrastructure in proximity to the Amherst Island helipad?
8. The Applicant's drawings do not include the location of the existing transmission infrastructure including the single submarine transmission line to the Island. The Island is particularly vulnerable as it has a single submarine cable that is not shown on any of Windlectric's drawings. What provisions have been made by Windlectric to protect the Island's single source of electricity?

Response

1. The proposed transmission facilities will have no impact on the supply of electricity to Amherst Island because they will not be electrically connected to the distribution system that serves the island. The proposed transmission facilities are radially connected to Hydro One's transmission system at a point of interconnection on the mainland. The Customer Impact Assessment and System Impact Assessment confirm that the Applicant's project will not adversely impact other customers or end users on either Hydro One's transmission system or on the IESO-controlled grid. Amherst Island is served by Hydro One's distribution system, which in turn is supplied from the Hydro One transmission system. The Customer Impact Assessment and System Impact Assessment therefore confirm that the island's electricity supply will not be adversely affected.

The proposed routing for the submarine section of the transmission line is not close to and will not interfere with the Hydro One distribution line that supplies the island or the Bell Canada telecommunication facilities that serve the island (See response to APAI Interrogatory #8.2, below). The referenced radio station, which is located over 0.6 km from the closest point along the transmission line, is also not expected to be affected by the proposed transmission facilities. The Applicant has designed the proposed transmission facilities in accordance with applicable standards in this respect so as to avoid interference with radio communications.

2. See response to APAI Interrogatory #8.1, above. See also the Existing Utilities Map at Exhibit C, Tab 2, Schedule 1, Figure 5(c) which shows existing submarine utilities. An annotated version of the Existing Utilities Map with labels showing the locations of existing submarine distribution and telecommunications cables is attached hereto as **Appendix 'B'**.

3. The Applicant does not understand the question that has been posed, but we nevertheless believe that the response to APAI Interrogatory #8.1, above, addresses the relevant concern.
4. The Applicant will design, construct and operate its transmission facilities in accordance with all applicable technical standards and requirements. As the proposed transmission facilities are a radial line, the sole purpose of which is to supply electricity from the wind generation facility to the IESO-controlled grid, an outage on the proposed transmission facilities will have no impact on any customers or end users on the island or elsewhere. The only consequence would be that Windlectric would, during such outage, be unable to deliver power to the IESO-controlled grid.
5. The turbines will not consume power from the Hydro One distribution system on Amherst Island during periods of low wind conditions as they will not be electrically connected to that system. See response to APAI Interrogatory #8.1, above. The only aspect of the transmission facilities that will draw power from the Hydro One distribution system will be the small equipment/control building that will be located within the project substation, which will require electricity for lighting, computers and other protection and control functions .
6. None. See response to APAI Interrogatory #8.1, above.
7. Approvals are not required from the Ministry of Health or ORNGE in connection with the proposed transmission facilities. The Applicant has nevertheless consulted with ORNGE regarding potential impacts of the generation project on the helipad. ORNGE did not raise any concerns with the proposed location of the transmission facilities and we understand that the arc flight path used by ORNGE does not conflict with the planned location of the transmission facilities. We note that the location of the helipad at 955 Stella 40 Foot Road on Amherst Island is immediately adjacent to (perhaps 20 meters from) a road along which are overhead electricity distribution lines. We further note that the helipad is approximately 1 km from the closest point along the proposed transmission line route.
8. See responses to #8.1 and #8.2, above.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #9

References

a. Exh.B/Tab 1/ Sch.1/Page 1 of 5/Section 2

Preamble

The success and viability of this Project, and the way in which it impacts consumer interests with respect to prices is tied to the viability of Windlectric Inc.

Questions / Requests

1. Please provide information on Windlectric, its' directors and staff and incorporation
2. How many transmission projects has Windlectric developed?
3. Please provide details of Windlectric's safety record in the design, development, operation and management of transmission facilities.
4. Was the Application for Leave to Construct to the Ontario Energy Board made in writing by one or more of Windlectric's Directors authorized to bind the company?
5. Please provide a copy of this authorization signed by one or more of Company Directors?
6. Does Windlectric Inc. have sufficient assets and insurance to protect the leaseholders and landholders of Loyalist Township, the County of Lennox and Addington, and the community in the event that there is a marine accident including a spill, an industrial accident, a fire or lightning strike or any other type of accident that could harm an individual or the environment on land or in the channel between Amherst Island and the mainland?
7. Please provide evidence in support of Question 9.6.
8. Will the Applicant provide a copy of Windlectric's insurance policy with respect to the proposed transmission facilities and Amherst Island Wind Project and all related correspondence?

9. Has the applicant provided evidence to its insurers that its Emergency Response Plan for the Amherst Island Wind Project is sufficient and complete?
10. Will Windlectric provide a copy of the applicant's Emergency Response Plan
11. Please provide a copy of the FIT contract and a summary of all amendments since it was awarded.
12. Please comment on why you believe the Windlectric application is ready for consideration by the OEB, and not premature?

Response

1. A description of the Applicant can be found at Exhibit B, Tab 2, Schedule 1 of the pre-filed evidence. Windlectric was incorporated in Canada in June 2008. It has two corporate Directors. It is anticipated that the transmission facilities will be operated pursuant to a services agreement between Windlectric and Algonquin Power.
2. As indicated in Exhibit B, Tab 2, Schedule 1 of the pre-filed evidence, Windlectric was established for the purposes of developing, owning and operating the Amherst Island Wind Energy Project. It does not own and has not developed any other operational facilities. Windlectric is part of the Algonquin Power family of companies, which has developed and which operates or has operated a number of transmission facilities. For example, Algonquin has developed a 50 km 115 kV transmission line and associated facilities in connection with the Shekak Generating Station near Hearst, Ontario, and a 25 km 115 kV transmission line and associated facilities in connection with the Long Sault Generating Station near Cochrane, Ontario. Algonquin also operates or has operated a number of transmission facilities, including the Shekak and Long Sault facilities, as well as high voltage substations associated with approximately 7 additional generating stations, and 30 km of transmission lines in connection with its Tinker Generating Station in New Brunswick. Algonquin's sister company Liberty Utilities also owns and operates over 300 miles of transmission facilities in the United States through its subsidiary CalPeco Electric.
3. There have been no notable safety incidents in connection with any of Algonquin's electricity transmission facilities, either during their construction or operation.
4. A copy of the application for leave to construct to the Ontario Energy Board is included in the pre-filed evidence at Exhibit B, Tab 1, Schedule 1. It was made in writing by Windlectric's external legal counsel on behalf of Windlectric.

5. See response to APAI Interrogatory #9.4, above.
6. This question relates to environmental, health and safety matters that are beyond the scope of the present proceeding. The Applicant nevertheless notes that appropriate insurance will be maintained during construction and during the operating life of the transmission facilities, and that it will ensure that any contractors it engages carry appropriate insurance as well.
7. See response to APAI Interrogatory #9.6, above.
8. The Applicant does not plan to file a copy of the requested insurance policies as these are not relevant to the proceeding and may be commercially sensitive.
9. This question is not relevant to the proceeding. See also response to APAI Interrogatory #5.10, above.
10. See response to APAI Interrogatory #5.10, above.
11. Exhibit B, Tab 3, Schedule 1 of the pre-filed evidence provides the relevant FIT Contract number and a link to the Ontario Power Authority's announcement of contract awards. Together, the information provided is sufficient to demonstrate the need for the proposed transmission facilities. The requested information is primarily concerned with the related generation facilities and is therefore not relevant to the present proceeding.
12. The Applicant has a FIT Contract from the Ontario Power Authority and a right to connect its planned generation facility to the grid in accordance with the principle of non-discriminatory access that is established in the legislation. As such, there is a clear need for the proposed transmission facilities. The Applicant has obtained a Customer Impact Assessment from Hydro One and a System Impact Assessment From the IESO in respect of its planned connection. The Applicant also has developed specific and detailed plans for its proposed transmission facilities and has filed an application and comprehensive pre-filed evidence in accordance with the Ontario Energy Board's filing requirements. Moreover, leave to construct, if granted, is expected to include conditions to ensure that Windlectric does not commence actual construction unless and until it has secured all other approvals and authorizations that are needed for purposes of constructing the transmission facilities.

ASSOCIATION TO PROTECT AMHERST ISLAND - INTERROGATORY #10

References

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Preamble

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Questions / Requests

Have the Mohawks of the Bay of Quinte, who are on record as being opposed to this energy project on Amherst Island been informed of Windlectric's Application?

Response

Yes.

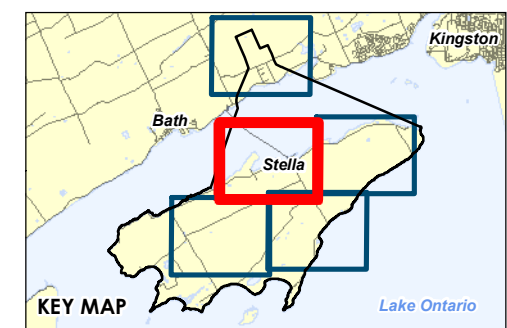
APPENDIX 'A'

Map of Transmission Facilities in Relation to Community Features

(Relates to APAI Interrogatories #5.3 and #5.4)



- Legend**
- Study Area
 - Access Road
 - Submarine Cable Path
 - Substation
 - Transmission Line Pole
 - Mainland Dock (Potential Location)
 - Island Dock
 - Batch Plant (Potential Location)
 - Site Office (Potential Location)
- Transmission Lines**
- Mainland Option 1
 - Mainland Option 2
 - Island Transmission Line
- Land Use**
- Central Staging Area
 - Switching Station (Potential Location)
- Existing Features**
- Road
 - Unopened Road Allowance
 - Railway
 - Watercourse
 - Property Line
 - Helipad
 - Radio Station
 - School
 - Built Heritage Resource
 - Protected Property
 - Cultural Heritage Landscape



- Notes**
- Coordinate System: NAD 1983 UTM Zone 18N
 - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2014.
 - Orthoimagery © First Base Solutions, 2014. Imagery taken in 2008.

December 2014
160960595

Client/Project
Windlectric Inc.
Amherst Island Wind Energy Project

Figure No.
1.2

Title
Leave to Construct

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Revised: 2014-12-15 By: pworsell

APPENDIX 'B'

Annotated Existing Utilities Map

(Relates to APAI Interrogatory #8.2)

