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Without prejudice to all our rights

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Ontario Energy Board
P.O. Box 2319
2300 Yonge St, 27th Floor
Toronto, Ontario, M4P 1E4

File No. EB-2014-0300

Attn: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

Re: REA documentation that does not meet the requirements stated in O. Reg 359/09

APAI has previously forwarded volumes of information to the Ontario Government detailing the many issues that arise from the proposed Algonquin Power / Windlectric project. Below you will find a summary of some instances where Algonquin Power / Windlectric REA documents do not meet the minimum requirements outlined in O. Reg. 359/09. As the Project is presently in technical review, we seek your assurance that the issues listed below will be addressed while the project remains in technical review.

REA Documents that do not meet the requirements stated in table 1 of O. Ref. 359/09

Specification Report: Requirements per O. Reg. 359/09 Table 1

Provide specifications of each wind turbine, including:
1. The make, model, name plate capacity, hub height above grade and rotational speeds.
2. The acoustic emissions data, determined and reported in accordance with standard CAN/CSA-C61400-11-07, "Wind Turbine Generator Systems — Part 11: Acoustic Noise Measurement Techniques", dated October 2007, including the overall sound power level, measurement uncertainty value, octave-band sound power levels (linear

weighted) and tonality and tonal audibility.

Below summarizes previously provided information detailing how the Windlectric Noise Assessment Reports do not meet the Ministry's published guidelines:

- The 40 dBA sound pressure level predictions made by Hatch for the Windlectric development do not represent the worst case scenario demanded by the 2008 Ontario noise regulations for wind turbine noise.
- The sound power used by Hatch does not include an allowance for the uncertainty in the test measurement, as specified by IEC 61400-14.
- Hatch worked with an out-dated 2002 version of IEC 61400-11. There have been two revisions (2006 and 2012).
- The Hatch noise assessment did not include a measurement of the wind shear coefficient and made no correction to the Siemens' turbine noise specifications for the wind shear coefficient that Hatch pulled out of the air!

Clearly, the minimum requirements stated in O. Reg. 359/09 have not been met.

Design and Operations Report Requirements per O. Reg 359/09 Table 1

• 2. Set out conceptual plans, specifications and descriptions related to the design of the renewable energy generation facility, including a description of,
◦ i. any works for the collection, transmission, treatment and disposal of sewage, including details of any sediment control features and storm water management facilities,
◦ ii. any things from which contaminants are discharged into the air,
◦ iii. any systems, facilities and equipment for receiving, handling, storing and processing any waste, biomass, source separated organics, farm material and biogas, and
◦ iv. if the facility includes a transformer substation, the works, facilities and equipment for secondary spill containment.

Regarding point IV in the table above, project components detailed by Algonquin Power include a transformer substation to be located on Amherst Island. According to Table 1.1 *Design and Operations Report Requirements*, the information noted in red above is provided in section 4.2. Below you will find section 4.2 of the Report that clearly does not provide the required information regarding "the works, facilities and equipment for secondary spill containment", notably the word "spill" does not appear in section 4.2.

4.2 MAINTENANCE PROGRAM

During pre-operational mobilization, Windlectric and/or the operations and maintenance contractor would develop an operations and maintenance

program. The program would be designed to ensure compliance with any applicable municipal, provincial, and/or federal requirements. As appropriate, the program would cover staff training, predictive/preventive maintenance, routine maintenance, unscheduled maintenance (including appropriate environmental mitigation measures), annual overhauling, inspection of equipment and components, and procurement of spare parts. It would also include a schedule for regular inspections of the Project's facilities.

The maintenance of the turbines would be the responsibility of Windlectric and/or the operations and maintenance contractor. The maintenance staff would be able to monitor the performance of all turbines on-line in real time basis. Monitoring of the turbines would occur 24 hours a day/7 days a week within the operations and maintenance building and remotely. The on-line system would identify any potential problems so that pro-active inspection and maintenance can be undertaken. Potentially damaged turbines would be shut down until maintenance staff can perform a site inspection. Regular maintenance of Project equipment would be a key method of mitigating potential effects such as equipment failure. Scheduled maintenance will likely cover the following:

- Visual inspection;
- Inspection of mechanical components, stormwater management, high voltage systems;
- Inspection of electrical components; and
- Greasing and general maintenance.

Although the exact oil and grease requirements for the wind component of the Project are not known at this time, oil changes will be completed in accordance with oil analysis recommendations. The amount of oil and grease stored on site would depend on availability, transportation schedules, and the service cycle. Used oil would be stored in a designated area of the operations and maintenance building, and picked up by certified contractor with the appropriate manifests in place.

If there is oil/grease detected in the transformer catch basin, the liquid would be removed from site via a licensed waste hauler and the source of the leakage would be determined and rectified.

As spills containment is not addressed in the section specifically designated by the proponent to speak to the issue, clearly the requirements of Reg.359/09 have not been met.

Design and Operations Report Requirements per O.Reg 359/09 Table 1

<p>3. Set out conceptual plans, specifications and descriptions related to the operation</p>

of the renewable energy generation facility, including,
i. in respect of any water takings,
A. a description of the time period and duration of water takings expected to be associated with the operation of the facility,
B. a description of the expected water takings, including rates, amounts and an assessment of the availability of water to meet the expected demand, and
C. an assessment of and documentation showing the potential for the facility to interfere with existing uses of the water expected to be taken,

Regarding point C in the table above, section 4.6 *Water Taking*, of the *Design and Operations Report* states:

“An aboveground non-potable water tank (capacity of 10,000L) would service the operations and maintenance building. No groundwater or surface water supplies are anticipated to be used for the facility. A water well may be installed/permitted to service the operations and maintenance building for sanitary purposes if it is determined that use of the water tank is not sufficient. The well would be used for drinking water if water quality meets regulatory requirements for potable water. It is expected that water will be used to hose down the floor or the workshop. A sump/drainage pit will collect the residues and drain to the septic system.”

Section 4.6 *Water Taking*, of the *Final Design and Operations Report* states:

Aboveground potable and non-potable water tanks (capacity of 10,000L) would service the operations and maintenance building. The above ground potable water tank will be replenished as required by a licensed hauler.

No groundwater or surface water supplies are anticipated to be used for the facility. It is expected that water will be used to hose down the floor or the workshop. A sump/drainage pit will collect the residues and drain to the septic system.

However, the sections above neglect to address the substantial “water taking” that will be associated with the Cement Batch Plant described in the Project Description Report.

Therefore, as the water taking associated with the Cement Batch Plant has not been addressed, the requirements of O. Reg. 359/09 have not been met.

Design and Operations Report Requirements per O.Reg 359/09 Table 1

3. Set out conceptual plans, specifications and descriptions related to the operation of the renewable energy generation facility, including,

vi. if the facility includes a transformer substation,
A. a description of the processes in place to prevent spills,
B. a description of the processes to prevent, eliminate or ameliorate any adverse effects in the event of a spill, and
C. a description of the processes to restore the natural environment in the event of a spill.

Regarding the table above, according to Table 1.1 *Design and Operations Report Requirements*, this information is provided in section 4.10. Below you will find section 4.10 which clearly does not provide the required information regarding the prevention / amelioration of adverse effects or restoration process for spills.

4.10 ACCIDENTAL SPILLS

Some materials, such as fuel, lubricating oils and other fluids associated with turbine maintenance, transformers and/or the septic system, have the potential for discharge to the onsite environment through accidental spills. Design features to prevent and contain spills are discussed in Section 3.0.

Standard containment facilities and emergency response materials (spill kits) will be maintained on-site as required. Refueling, equipment maintenance, and other potentially contaminating activities will occur in designated areas.

In the event of a potential discharge of fluids associated with Project operation, the operations and maintenance contractor will immediately stop work and rectify the accidental spill. Once the spill is under control the contractor will remove contaminated soil and dispose of it in accordance with the current appropriate provincial legislation, such as Ontario Regulation 347, the General – Waste Management Regulation. **The Emergency Response Plan will contain procedures for spill contingency and response plans, spill response training, notification procedures, and necessary cleanup materials and equipment.** As per s. 13 of the *Environmental Protection Act*, all spills that could potentially have an adverse environmental effect, are outside the normal course of events, or are in excess of prescribed regulatory levels should be reported to the MOE's Spills Action Centre.

An Emergency Response and Communications Plan would be developed by Windlectric and/or the operations and maintenance contractor and would include protocols for the proper handling of material spills and associated procedures to be undertaken in the event of a spill. See Section 7.0 for more information on the Emergency Response and Communications Plan.

Section 3.0 which according to above provides “Design features to prevent and contain spills” is listed below and clearly provides no information regarding “design features to prevent and contain spills”.

Design and Operations Report / Facility Design Plan / 3.7

Associated with the Project will be a substation. At the substation, the accumulated power from the collector lines will be transformed from a 34.5 kV collection voltage to a 115 kV transmission voltage. The substation will be located on private land on the north side of 2nd Concession Road between Stella 40 Foot Road and Dump Road. A chain link safety fence, with barbed wire top section, will enclose the substation. A locked vehicle gate will allow for maintenance access.

The substation will house the switching, control, protection, communication and metering systems required to support the operation of the substation. The substation will include one (1) 34.5/115 kV transformers.

A sound attenuation wall will be built at the substation transformer. The barrier will be continuous and its surface density will be 184 kg/m², exceeding the 20-kg/m² requirement established by MOE and further described in the *Draft Noise Assessment Report*.

As the required information regarding the prevention / amelioration of adverse effects or restoration process for spills is not addressed in the section specifically designated by the proponent to speak to the issue, clearly the requirements of Reg.359/09 have not been met

Design and Operations Report Requirements per O.Reg 359/09 Table 1

5. Include a response plan setting out a description of the actions to be taken while engaging in the renewable energy project to inform the public, aboriginal communities and municipalities, local roads boards and Local Services Boards with respect to the project, including,
i. measures to provide information regarding the activities occurring at the project location, including emergencies,
ii. means by which persons responsible for engaging in the project may be contacted, and
iii. means by which correspondence directed to the persons responsible for engaging in the project will be recorded and addressed.

Regarding point I in the table above, Section 7.1 *Emergency Response Plan* of the Final Design and Operations Report states:

“Windlectric and/or the operations and maintenance contractor would develop the Emergency Response Plan for the Project and discuss it with the Township’s Emergency Services Departments.”

As the Emergency Response Plan is yet to be developed it is impossible to provide the required information noted above. Clearly, the requirements of O. Reg. 359/09 have not been met.

The 3 items listed below are not listed in Table 1 of O.Reg 359/09 (Consolidation period: From November 2 2012 to the e-law currency date - Friday 10 Jan 2014), they are found in the text of O. Reg 359/09.

Item 1.

Confirmation from Ministry of Natural Resources

- 28.** (1) A person who proposes to engage in a renewable energy project shall submit to the Ministry of Natural Resources each plan the person is required to prepare under section 23.1 and each report the person is required to prepare under subsections 25 (3), 26 (3) and 27 (4). O. Reg. 359/09, s. 28 (1); O. Reg. 521/10, s. 17 (1).
- (2) The person mentioned in subsection (1) shall obtain the following in writing from the Ministry of Natural Resources:
1. Confirmation that the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures set out in the Natural Heritage Assessment Guide.
 2. If no natural features were identified, confirmation that the site investigation and records review were conducted using applicable evaluation criteria or procedures set out in the Natural Heritage Assessment Guide.
 3. Confirmation that the evaluation of the significance or provincial significance of the natural features was conducted using applicable evaluation criteria or procedures set out in the Natural Heritage Assessment Guide.
 4. If the person has determined that the project location is not in a provincial park or conservation reserve, confirmation that that Ministry agrees with the determination.
 5. If the person has determined that the project location is in a provincial park or conservation reserve, confirmation that engaging in the project is not prohibited by or under the *Provincial Parks and Conservation Reserves Act, 2006*.
 6. If section 23.1 applies, comments received from the Ministry of Natural Resources in respect of the environmental effects monitoring plan required

under that section. O. Reg. 359/09, s. 28 (2); O. Reg. 521/10, s. 17 (2); O. Reg. 333/12, s. 8.

- (3) As part of an application for the issue of a renewable energy approval, the person mentioned in subsection (1) shall submit,
- (a) the plan and reports mentioned in subsection (1);
 - (b) a copy of any confirmation or comment required under subsection (2); and
 - (c) any additional written comments provided by the Ministry of Natural Resources in respect of the natural heritage assessment. O. Reg. 359/09, s. 28 (3); O. Reg. 521/10, s. 17 (3, 4).

Comment: Looking at items (2) 6. and (3) c above in red it would appear that the Proponent must provide as part of their REA Application all correspondence between themselves and Ministry of Natural Resources. This documentation was not provided as part of the REA Application as required by O.Reg. 359/09.

Item 2

Archaeological assessment, documents to be included in application

- 22.** As part of an application for the issue of a renewable energy approval, a person subject to subsection 20 (4) or 21 (2) shall submit,
- (a) written comments provided by the Ministry of Tourism, Culture and Sport in respect of the archaeological assessment;
 - (b) the archaeological assessment report; and
 - (c) if the project location is on property described in paragraph 2 of subsection 20 (2), a copy of the permit issued by the Minister of Tourism, Culture and Sport to excavate or alter the property or to remove an artifact from that property, as the case may be. O. Reg. 195/12, s. 14.

Comment: Looking at items 22 (a) above in red, it would appear that the Proponent must provide as part of their REA Application all correspondence between themselves and the Ministry of Tourism, Culture and Sport. This documentation was not provided as part of the REA Application as required by O.Reg 359/09.

Ms. Walli, the above clearly details how the Windlectric REA application does not meet the requirements listed in O. Reg. 359/09.

Regards,

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