**IN THE MATTER OF** the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B;

**AND IN THE MATTER OF** an application by wpd White Pines Wind Incorporated for an order or orders pursuant to section 92 of the Ontario Energy Board Act, 1998 granting leave to construct transmission facilities in Prince Edward County.

#### **INTERROGATORIES OF APPEC**

## 1) Incomplete and/or inaccurate documentation regarding the route of the transmission line as depicted in the Application.

- a) The Alliance to Protect Prince Edward County ("APPEC") remains unsure of the exact proposed route of the transmission line. Please provide exact property descriptions and the locations of those properties for the length of the transmission line that accurately describes the route.
- b) Please explain how the proposed transmission line is compliant with the restrictions provided for a renewable energy generation facility in O. Reg. 160/99, sections 4(1), 5(2) and 5(3), under the *Electricity Act*, 1998 given the total length of the transmission line and the lines within the facility itself.
- c) According to Tile 5 of the White Pines Wind Project Interconnection Line Effects Assessment, the transmission line crosses the Milford Black Creek Valley Provincial ANSI. This is an Earth Science ANSI. However the Design and Operation Report (5.3.2) states that "Black Creek Valley Provincially Significant Earth Science ANSI – access roads have been sited within the ANSI boundary, and turbines, collector lines and access roads are also found within 50 m of the ANSI boundary. The Design and Operation Report indicates that an access road is in the Earth Sciences ANSI but not the

transmission line. However Tile 5 indicates otherwise. Please confirm whether the Transmission Line is in the Black Creek Valley Provincially Significant ANSI or not.

- 2) Incomplete and/or inaccurate and/or contradictory documentation regarding the construction of the transmission line and whether or not the transmission line can/will be able to be constructed underground along its length.
  - a) Stantec's White Pines Wind Project Consultation Report "Project Response" states that
    "wpd is officially planning to bury the entire interconnection line underground within the multiple right-of-way with the exception of two bridge crossings. . ." However Stantec's White Pines Wind Project Interconnection Line Effects Assessment (May 2013) states that:
    - i) "Should portions of the interconnection line be installed above ground on new poles, equipment used may include a tandem truck pole carrier equipped with an integral crane, a truck or track mounted pole auger, and a backhoe or track mounted excavator." Please advise on present understanding, based on current information, that the transmission line is to be buried in its entirety, with exceptions noted in Stantec reports.
  - b) Please advise as to whether any detailed pre-construction feasibility study been done along the proposed transmission route. Given the unique geological circumstances in Prince Edward
    - County including the prevalence of limestone bedrock what, if any, consultation been done with geologists and experts that can advise on the feasibility of burying transmission lines in these specific conditions? Has wpd consulted with anyone other than Stantec and if so who?

- c) Please explain in detail what measures wpd will take to ensure that any construction activity long the length of the transmission line does not affect the landowners' use and enjoyment of their properties.
- d) Please explain what type of transmission line wpd intends to construct, solid dielectric cable or another type of technology. Please provide manufacturer details and other relevant details of the intended method of construction including the required maintenance and reliability of same over the lifetime of the transmission line.
- e) The understanding of APPEC is that the installation of an underground transmission cable generally involves the following sequence of activities:
  - i) Right of Way clearing
  - ii) Trenching/blasting
  - iii) Laying and/or welding pipe
  - iv) Duct bank and vault installation
  - v) Backfilling
  - vi) Cable installation
  - vii) Adding fluids or gas
  - viii) Site restoration.
  - ix) Please provide a detailed report of the steps wpd intends to take for each of these stages and the proposed timeline for each.
- f) Regarding subsection 2) e) i), Right of Way clearing, above, the Interconnection Line Heritage Assessment Report recommends for the Maypul Layn Road/Royal Road
   Cultural Heritage Landscape that "installation of below-grade infrastructure avoid removal of or damage to trees lining Maypul Layn Road or Royal Road. Landscaping

features, such as fencing or vegetation, should not be removed for the installation of transmission infrastructure. Any such disturbances that cannot be avoided should be repaired immediately following Project construction activities." What measures will wpd take to (a) document existing trees and landscaping features along the entire line, (b) safeguard this documentation in a public place, and (c) ensure that the same trees and features, which may include mature trees, historic fencing or other man-made features, and wild, indigenous plants are replaced immediately?

- g) Regarding subsection 2) e) iv) above, it is the understanding of APPEC that vaults are typically approximately 10 by 30 feet in area and 10 feet high. They have chimneys constructed with manholes which workmen use to enter the vaults for cable maintenance. Please advise as to whether wpd will be using vault installation?
- h) If so, please provide additional information regarding the specific location of vaults, the construction work required to install vaults, and any and all potential impacts on neighbouring property owners and businesses during their installation.
- According to the Application documentation, culverts are required for collector lines through the sensitive marsh and wetlands spread across the South Shore. According to the Interconnection Line Water Assessment and Water Body Report, 13 water bodies were identified within 120 metres of the proposed Interconnection Line. However no culverts have been noted in documentation of Transmission Line. Please advise as to whether permanent culverts will be required along the length of the proposed 28 kilometre Transmission Line?
- j) Both transmission and collector lines are proposed to be laid along certain roads, for example along Maypul Layn Road. Please identify all roads that will have both

transmission and collector lines. In addition, please advise as to whether both lines will be buried in same trench?

- k) Please provide confirmation of consideration of road allowances along Transmission Line route and alternatives along forced roads such as Maypul Layn Road and Crowes Road.
- Please advise what plans, if any, will be implemented to protect individual ducts against accidental future dig-ins? Will there be a system of warning signs ("high-voltage buried cable") along the 28 kilometre transmission route and, if so, how many would be required and at what locations along the transmission route?
- m) In its Application wpd makes no mention of potential decommissioning work impacts within or near watercourses and/or aquatic habitat. Approximately 28 km of cable is to be buried in the road allowances of existing roads, in and near seasonal and permanent wetlands, Warings Creek Watershed (Roundabout\_Picton\_MTO\_20131220) and crossing the Big Swamp wetland. Please advise as to whether there are studies on the effects of decommissioning near watercourses and aquatic habitat.
- n) The decommissioning of the proposed transmission line will impact owners of land along the route. What compensation will wpd ensure is available to owners of land affected by the decommissioning of the 28 kilometre transmission line?
- o) The majority of reports on wpd's website are almost a year old and in many cases more.
  Please confirm if further investigations have been conducted regarding the feasibility of burying the Transmission Line since the publication of these reports. Please confirm, based on your present level of understanding, how much of the line can/will be constructed underground along its length. Please provide specifics based on current

understanding of the exact location of any parts of the line that will not be constructed underground, if any.

p) If it is not possible to construct the entirety of the line underground, what type/size of poles are to be used? Could modifications involving overhead line construction be made in the event that the Ontario Energy Board grants Leave to Construct the Transmission Line. What mitigation measures will wpd take to ensure the neighbouring landowners are not impacted by the location of the poles?

# 3) Incomplete documentation regarding construction and deconstruction of the transmission line at the end of its expected utility.

- a) As noted above documents on website are up to a year or more old. Please provide up to date information regarding proposed construction plans and timelines.
- b) If granted Leave to Construct would wpd commence construction on the Transmission Line before receiving REA approval?
- c) Please provide details of how exactly wpd proposes to decommission the entire transmission line as the information contained in its June 2012 Decommissioning Plan only appears to contemplate wpd being responsible for the May and Fry portions of the transmission line.

#### 4) The land acquisition agreement that forms part of this Application.

a) Please provide a complete list of the landowners on whose lands the transmission line is proposed to be constructed and state whether or not those landowners have agreed to the proposed construction in writing.

- b) Please list the landowners who have been presented with the land acquisition agreement that forms part of this Application.
- c) Please provide a complete list of the easements that will be required from landowners in order to construct the transmission line according to the proposed route.
- 5) The lack of consultation with neighbouring property owners and the potentially serious impact on residences and other buildings, some of which have heritage designation, along the proposed route of the transmission line including those not subject to easements.
  - a) APPEC is concerned about any impacts from construction on a total of 166 structures along the proposed transmission line route, a number of which are less than 10m/20m/30m and 40m from the proposed Transmission Line. According to Stantec's report "negative effects have been demonstrated on buildings with a setback of less than 40m from the curbside." Please advise if wpd has surveyed the structures along the entire route of the proposed transmission line to determine the general level of risk to the County's building stock and where special care will be taken when trenching or blasting, if necessary, is required. Attached as Appendix 1 is a chart listing the heritage buildings at issue.
  - b) Please explain what mitigation measures wpd will take for all residences and other buildings, some of which have heritage designation, including those not subject to easements to ensure that they are not damaged in any way by the construction of the proposed transmission line given that many buildings are located 40 metres or less away from the centre of the proposed route.

- c) Please explain how wpd is prepared to compensate property owners who may suffer damage to their property and/or buildings thereon during the course of the construction of the proposed transmission line.
- d) Please explain what measures wpd intends to put in place prior to construction of the proposed transmission line along Maypul Layn Road to ensure that no damage is caused to any of the heritage trees lining Maypul Layn Road, many of which are over a century old and whose root systems are more likely than not to be entwined under the road surface.
- e) Please confirm that wpd will follow the same principles for identifying visual impacts for poles as for the main White Pines project, including establishing culturally significant viewpoints along the route, especially for already identified Cultural Heritage Landscapes.
- f) Does wpd have a plan for preserving the tree-lined streetscape along parts of Crowes Road that is equivalent in character to that along Maypul Layn Road, while at the same time maintaining Crowes Road in its current state of no existing energy infrastructure (i.e., no poles)?
- g) Further to subsection 2) e) i) above, will the entire right of way, along the entire route, have to be cleared of trees and landscaping features, such as fencing or vegetation, for the installation of underground cable? Where clearing will take place, please confirm the extent of the clearing from the edge of the road bed along the route, including variations in distance along different sections, and a description of what will be cleared along various sections. Given the recommendation to avoid such clearing for the Maypul Layn/Royal Road Cultural Heritage Landscape, will wpd consult with the municipality

and its Heritage Advisory Committee and be guided by the municipality's preference for poles or underground cable for this particular length of the line?

- h) Regarding subsection 2) e) ii) above, Trenching/blasting, above, has wpd surveyed the structures along the entire line to determine the general level of risk to the County's building stock and where special care should be taken when trenching/blasting, e.g. by assessing: number of structures less than 10 m/20 m/30m and 40 m from the line; construction type, especially whether brick or stone, which are more prone to vibration damage; whether modern or a Protected Property, Built Heritage Resource, and/or part of a Cultural Heritage Landscape? If so, are the findings similar to those in the attached table ("Structures along wpd Interconnection Line"), which documents 165 structures within 40 m of the line (Section 7.1.1, Interconnection Line Heritage Impact Assessment, states "negative effects have been demonstrated on buildings with a setback of less than 40 m from the curbside")?
- i) Further to subsection 2) e) ii) above, the Interconnection Line Heritage Assessment
  Report (Section 8) recommends for 41 cultural resources along the line within a 60 m
  buffer zone that "Pre and post construction inspection of the buildings and their
  foundations is recommended by a qualified engineer in order to confirm their capacity to
  withstand Project-related vibrations." Since all structures along the line are vulnerable to
  Project-related vibrations, will wpd, for all structures within the buffer zone, engage a
  geostructural specialist, as distinct from the more general description of "qualified
  engineer," to (a) carry out pre and post condition surveys of the structures, including the
  use of Vernier-type gauges for pre-existing cracks; and (b) recommend and monitor

maximum peak particle velocity levels for different types of construction and proximity to trenching/blasting?

#### 6) The proximity of the substation to residential dwellings.

 a) Please explain what steps wpd will take to ensure the proximity of residential dwellings to the proposed location of the substation will not result in either harm to residents or the release of stray voltage that has been known to harm both persons and livestock.

#### 7) **Quality and reliability of service.**

- a) Throughout the summer months, particularly in July, the White Pines turbines will be drawing electricity off grid when there is no wind. How does wpd foresee this impacting the reliability and quality of electrical service to the many homeowners and businesses in South Marysburgh and Athol?
- b) What plans if any to compensate property owners for disruption in their property use for property damage that is caused by repairing underground transmission lines? APPEC considers that this issue has not been adequately dealt with in the Interconnection Line Effects Assessment under the heading "Operation" in which it states "No negative effects on utilities are anticipated and no mitigation measures are required."
- c) What plans if any to compensate property owners and businesses for disruption to service during construction? Under "Utilities" in Interconnection Line Effects Assessment, wpd notes that "Potential exists for interference with local utilities."

#### **Further Issues**

- 8) As noted in the Application, wpd is requesting leave to construct transmission facilities to connect the White Pines renewable wind energy development project to the transmission grid controlled by the Independent Electricity System Operator ("IESO"). However wpd has been publicly promoting its White Pines Wind Farm for over two years as a project that will feed electricity into the local electricity grid. According to the home page of the White Pines Wind Farm website [canada.wpd.de/projects/in-canada/white-pines/general-information.html] under "Project Description" the applicant states that: "The White Pines Wind Farm is considered a Class 4 wind facility, and will feed an estimated 169,464,000 kWh annually into the local electricity grid, equivalent to the average annual power use of 9,683 homes." Please explain how both of those scenarios are possible?
- 9) Pursuant to the following email, please indicate whether wpd followed up on the invitation from Hydro One to establish joint use for its 34.5kV collector system and if not, why not?

From: john.boldt(a)HydroOne.com [mailto:john.boldt@HydroOne.com]

Sent: Wednesday, November 21, 2012 11:52 AM

To: Paul Deol

Subject: FW: White Pines Joint Use

Good morning Paul,

I hope all is going well. As we had discussed on the phone, Hydro One Networks Inc.'s policy is to establish Joint Use with IDCs and generators for their collector circuits with voltages up to 50kV. To date, HONI has established joint use in the power space on poles with generators, for their collector systems, on 3331 HONI-owned poles.

If and when you obtain your OPA contract, please contact me and Hydro One Networks Inc. will be willing to establish joint use for your 34.5kV collector system if you so wish. Sincerely, John Boldt Commercial Agreements Manager- Hydro One Networks Inc.

- 10) On May 31, 2012 Kevin Surette, wpd Manager, Communications stated that: "Regarding additional turbines, wpd's contract with the Ontario Power Authority (OPA) is limited to a maximum 60MW of nameplate output." This implies that wpd had an OPA contract in May, 2012. However John Boldt's message of November 21, 2012 (above) indicates that wpd has not obtained an OPA contract. Please advise as to whether wpd has an OPA contract?
- 11) It is the understanding of APPEC that archaeological assessment for the entire 28 kilometres of the proposed transmission line was conducted over 4 days. According to the Adams Heritage, "Stage 1 and 2 White Pines Wind Project Transmission Line Milford to Gorsline Road, Prince Edward County", dated December 2012 at page 1, the Field Testing for the Stage 2 Archaeological Assessment for the Transmission Line was conducted on December 9, 12, 15, and 27, 2011. Please provide detailed field notes and other pertinent information to substantiate that the entire 28 kilometre route was assessed during these four days.

Date: March 19, 2014

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