

**Draft Conditions of Approval**  
**Summerhaven Wind LP - Leave to Construct Proceeding**  
**EB-2011-0027**

**Note:**

The Conditions of Approval attached to the Board's Decision and Order include references to permits and approvals by other organizations, crown corporations, or Government Ministries that are prerequisites that must be secured or complied with by the Applicant for successful completion of the facilities that are the subject of this Ontario Energy Board process. The Ontario Energy Board is, however, not responsible for implementation or operationalization of any of the requirements enumerated in such permits or approvals or the reports associated therewith even where such permits, approvals or associated reports are required, for any reason, to be filed with the Board.

**1.0 General Requirements**

- 1.1 Summerhaven Wind LP ("Summerhaven" or the "Applicant") shall construct the 9 km of 230 kV overhead transmission line and associated facilities (the "Transmission Facilities") and restore the Transmission Facilities' land in accordance with its Leave to Construct application, evidence and undertakings, except as modified by the Board's Decision and Order and by these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2012 unless construction of the Transmission Facilities has commenced prior to that date.
- 1.3 Summerhaven shall implement all the recommendations included in the Decision from the Ministry of Environment regarding the *Renewable Energy Approvals under Part V.O.1 of the Act made pursuant to the Environmental Protection Act*, R.S.O. 1990,c. E.19.
- 1.4 Summerhaven shall satisfy the Independent Electricity System Operator ("IESO") requirements and recommendations as reflected in the System Impact Assessment document dated November 4, 2010, and such further and other conditions which may be imposed by the IESO.
- 1.5 Summerhaven shall satisfy Hydro One Networks Inc.'s requirements as reflected in the Customer Impact Assessment document dated November 9, 2010, and such further and other requirements or conditions which may be imposed by Hydro One Networks Inc.
- 1.6 Summerhaven shall advise the Board's designated representative of any proposed material change in the Transmission Facilities, including but not limited to material

changes in the proposed route, construction techniques, construction schedule, restoration procedures, or any other material impacts of construction. Summerhaven shall not make a material change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed as soon as practicable.

- 1.7 Summerhaven shall obtain all necessary approvals, permits, licences, certificates and easement rights required to construct, operate and maintain the Transmission Facilities, and shall provide copies of all such written approvals, permits, licences and certificates and any related reports or documentation upon the Board's request.

## **2.0 Reliability Considerations - Transmission and Distribution Lines**

- 2.1 The Applicant is required to design and construct a portion of its 230 kV transmission line on the south side of Concession Rd 5, to accommodate Haldimand County Hydro Inc. ("HCHI") if it chooses to locate its proposed two 27.6 kV 3 phase circuits on the south side of Concession Rd. 5 (the "Co-location Option") for a certain distance (the "Adjacent Length").
- 2.2 Under the Co-location Option, the transmission pole locations, pole heights, and clearances along the Adjacent Length shall accommodate the proposed distribution line as described in drawing 01-316 of the Kinectrics Report.<sup>1</sup>
- 2.3 Under the Co-location Option, the Applicant's 230 kV transmission line along Concession 5 must be located on private property 5 metres from the edge of the right of way on the south side of Concession Rd. 5 or 6.3 metres from the centreline of the proposed two 27.6 kV 3 phase circuits.
- 2.4 The transmission line must be designed to accommodate the distribution neutral height of 25 feet (7.62 metres) above the crown of the road.
- 2.5 Under the Co-location Option and in the event that the transmission line has been constructed first, HCHI shall locate its distribution poles such that a minimum distance of 10 metres is maintained between any distribution pole and any transmission pole. Under the Co-location Option, and in the event that the distribution line with the two 27.6 kV 3 phase circuits, has been constructed first, the Applicant shall locate its transmission line poles such that a minimum distance of 10 metres is maintained between any transmission pole and any distribution pole.
- 2.6 With the potential exception of the crossing of the 230 kV transmission line at Concession Rd. 4, due to environmental considerations, all road crossings shall be designed and built to provide adequate clearance for HCHI's future needs, whether or not the Co-location Option is selected by HCH. Should issues arise for the

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<sup>1</sup> HCHI's Evidence dated May 31, 2011, Induction Study For Haldimand County Hydro Inc

crossing of the 230 kV line at Concession Rd.4, the Applicant and HCHI will cooperate to ensure selection of an acceptable configuration to both parties.

- 2.7 The Applicant shall make every commercially reasonable effort to avoid locating guy wire anchors within a municipal road right-of-way.
- 2.8 Where any span guys cross over the roadways, appropriate clearances under the span guys must be provided to HCHI in order to construct the noted proposed two 27.6 kV 3 phase circuits as described in drawing 01-316 of the Kinectrics Report, including maintaining a neutral height of 25 feet (7.62 metres) above the crown of the road.
- 2.9 In order for HCHI to construct the two proposed 27.6 kV 3 phase circuits as described in drawing 01-316 of the Kinectrics Report, the Applicant shall provide HCHI with all necessary information related to the location of any span guys that cross over the roadways.
- 2.10 The Applicant shall carry out and make available to HCHI a neutral voltage survey ("Neutral Voltage Survey") to establish a baseline prior to commercial operation of the transmission line, and a post-energization Neutral Voltage Survey that would be based on field measurement. For any areas that are identified as requiring mitigation, the Applicant and HCHI will jointly decide on the appropriate mitigation steps, which the Applicant will undertake at its own cost.
- 2.11 Should HCHI select the Co-location Option, and should HCHI choose to use additional grounding at the distribution poles for the stretch of the distribution line in the Adjacent Length as recommended by the Applicant,<sup>2</sup> the Applicant will absorb the cost of the difference between the standard design as specified by HCHI in its June 23, 2011 submission and the proposed design noted in the Applicant's Reply Submission.
- 2.12 The Applicant shall bear the cost of installing neutral decoupling devices on HCHI's existing infrastructure at relevant customer points of interconnection. It is anticipated that this would pre-empt any possibility that unacceptable animal contact voltage may arise as a result of the transmission line. In principle, should installation of such devices prove to be insufficient or inadequate at any of the customer points of interconnection as identified by HCHI in its evidence,<sup>3</sup> the Applicant will be responsible for costs to mitigate and reduce the level of the animal contact voltage to within the acceptable level as set out in the distribution system code,<sup>4</sup> provided that HCHI has implemented the Applicant's recommendation for ground rod specification as outlined in the Applicant's Reply Submission.<sup>5</sup>

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<sup>2</sup> Applicant's Reply Submission, July 27, 2011, paragraph 40.

<sup>3</sup> HCHI's responses to Applicant's interrogatory #4, question (c), and to Board staff interrogatory 3, question (i)

<sup>4</sup> Distribution System Code, last revised February 7, 2011, Section 4.7

<sup>5</sup> July 27, 2011 at paragraph 40.

- 2.13 The Applicant will be responsible for the additional cost of over sizing lightning arresters for HCHI's proposed two 27.6 kV 3 phase circuits, to take into account the expected voltage rise due to induction as recommended in the Applicant's Reply Submission.<sup>6</sup>
- 2.14 The Applicant and HCHI shall make best efforts to address all issues that arise in respect of the design and construction of the Transmission Facilities where such design and construction impact upon the Adjacent Length. If the parties are unable to resolve any disputes and to the extent such disagreement impacts materially upon the construction of the Transmission Facilities, the Applicant shall notify the Board's designated representative of such disagreement.

### **3.0 Transmission Facilities and Communications Requirements**

- 3.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Electricity Facilities and Infrastructure Applications.
- 3.2 Summerhaven shall designate a person as Project engineer and shall provide the name of the individual to the Board's designated representative. The Project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Summerhaven shall provide a copy of the Order and Conditions of Approval to the Project engineer, within ten (10) days of the Board's Order being issued.
- 3.3 Summerhaven shall develop, as soon as possible and prior to the start of construction, a detailed construction plan. The detailed construction plan shall cover all material construction activities. Summerhaven shall submit five (5) copies of the construction plan to the Board's designated representative at least ten (10) days prior to the commencement of construction. Summerhaven shall give the Board's designated representative ten (10) days written notice in advance of the commencement of construction.
- 3.4 Summerhaven shall furnish the Board's designated representative with all reasonable assistance needed to ascertain whether the work is being or has been performed in accordance with the Board's Order.
- 3.5 Summerhaven shall, in conjunction with Hydro One, Ontario Power Generation and the IESO, and other parties as required, develop an outage plan which shall detail how proposed outages will be managed. Summerhaven shall provide five (5) copies of the outage plan to the Board's designated representative at least ten (10) days prior to the first outage. Summerhaven shall give the Board's designated representative ten (10) days written notice in advance of the commencement of outages.

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<sup>6</sup> Applicant Reply Submission, July 27, 2011, Schedule C-Peak Induction Study, Section VI – Mitigation, Section D – Surge Arresters

- 3.6 Summerhaven shall furnish the Board's designated representative with five (5) copies of written confirmation of the completion of Transmission Facilities construction. This written confirmation shall be provided within one month of the completion of construction.

#### **4.0 Monitoring and Reporting Requirements**

- 4.1 Both during and for a period of twelve (12) months after the completion of construction of the Transmission Facilities, Summerhaven shall monitor the impacts of construction, and shall file five (5) copies of a monitoring report with the Board within fifteen (15) months of the completion of construction of the Transmission Facilities. Summerhaven shall attach to the monitoring report a log of all comments and complaints related to construction of the Transmission Facilities that have been received. The log shall record the person making the comment or complaint, the time the comment or complaint was received, the substance of each comment or complaint, the actions taken in response to each if any, and the reasons underlying such actions.
- 4.2 the monitoring report shall confirm Summerhaven's adherence to Condition 1.1 and shall include a description of the impacts noted during construction of the Transmission Facilities and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction of the Transmission Facilities. This report shall describe any outstanding concerns identified during construction of the Transmission Facilities and the condition of the rehabilitated Transmission Facilities' land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

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