

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

AND IN THE MATTER OF an application by Northland Power Solar Empire L.P., Northland Power Solar Martin's Meadows L.P., Northland Power Solar Abitibi L.P., and Northland Power Solar Long Lake L.P. (the "Applicants"), to the Ontario Energy Board (the "Board") dated February 12th, 2013 under section 92 of the Act for an order of the Board granting leave to construct transmission facilities (the "Application") to connect four groundmount solar generation projects to the Ontario transmission system (the "Project").

APPLICANTS' RESPONSES TO BOARD STAFF INTERROGATORIES

DELIVERED APRIL 26, 2013

APPLICANTS' EXPERIENCE

Interrogatory 1

Reference: Exh. B/Tab 1/Sch. 1/p. 1/par. 3

Preamble:

At the above Reference, it is stated that:

"The Applicants are in the business of developing, constructing, owning and operating renewable generation projects and related facilities. Each of the four Applicants is constructing one 10 MW ground mount solar electricity generation facility in the vicinity of the Town of Cochrane, and each of the four generation facilities is subject to an Ontario Power Authority ("OPA") Feed-in Tariff ("FIT") contract (the four generation projects are collectively referred to as the "Generation Projects")."

Questions/Requests:

- (i) What experience do the Applicants have in the construction and operation of a similar type of facilities as that proposed in this application?
- (ii) Please indicate what corporate organization capabilities exist to complete the applied for project.

(iii) Please indicate whether the Applicants intend to make use of contractors and provide a summary of their experience in regards to the construction of such projects.

Response:

- (i) Northland Power Inc. ("NPI"), the limited partner of the Applicants and parent company of the Applicant general partners, has extensive experience operating existing thermal and wind power plants, totaling in excess of 1,000 MW.

NPI is developing a portfolio of 130 MW of solar OPA FIT contracts, which is consistent with NPI's experience. The solar portfolio is being constructed in (3) phases or clusters of 60, 30, and finally 40 MW.

The first or initial phase of 60 MW of projects is nearly complete. The second phase of 30 MW projects has started construction. The last phase or cluster of 40 MW, which relates to this Application, is the northern Cochrane developments, and these projects are not anticipated to pose any significant challenges to NPI.

In addition to its OPA solar FIT contracts, NPI is also currently preparing to commence construction on the approximately 10 km of 115 kV transmission line and related transmission facilities that will serve the 60 MW McLean's Mountain Wind Farm on Manitoulin Island. That transmission project received the Board's leave to construct in 2012 (OEB File No. EB-2011-0394). This is relevant because it is of similar or greater size and complexity, compared to the solar developments.

All of NPI's generation projects require the construction, maintenance and operation of distribution and/or transmission lines and related facilities. As a result, NPI has a significant amount of experience in the construction and operation of facilities similar to those that are the subject of the current Application.

- (ii) NPI is a public company traded on the Toronto Stock Exchange, with a market capitalization of \$1.6 billion on common float shares (\$2.4 billion including all classes of shares). The company has over 25-years of experience as an Independent Power Producer (IPP), and currently owns and operates over 1,000 MW of generation assets.

NPI will be able to fund the Transmission Facilities as NPI has enjoyed continued access to capital markets over the past two years with the raising of specific project financing of over \$1,067 million for five separate

projects as well as over \$300 million through issuance of convertible debentures, preferred shares and common equity shares.

NPI has the departments and staff described below, and provides dedicated full time staff to all of its project developments, including the Cochrane solar developments and transmission line.

These departments include and are as structured as follows:

- 1) Development (permits and approvals);
- 2) Design and Engineering (coordinates and oversees the preliminary engineering (30%) design to facilitate permitting, tendering and EPC contract award;
- 3) Environmental Health and Safety (EH&S) – ensures that once developments or plants are permitted, under construction, or operating, that they meet all regulatory requirements;
- 4) Construction – internal group that oversees and manages construction and the EPC contractor;
- 5) Finance and Accounting;
- 6) Operations – oversees the operation and maintenance of the facilities. In the case of solar a new and dedicated team of employees has been hired to oversee the solar operations; and
- 7) Human Resources.

NPI is using bankable and financeable major equipment suppliers with appropriate warranties. For example, SMA inverters, MEMC/SunEdison solar modules, and Cosma racking (manufactured by Magma).

- (iii) NPI intends to use a large, well known, proven engineering, procurement and contracting (“EPC”) service provider to construct the development.

NPI has awarded “turn-key” EPC contracts to Miwel Construction (“Miwel”), a division of Aecon, for the first six 10 MW solar projects. Miwel has been issued Limited Notice to Proceed (LNTP) for the next three 10 MW solar FIT Contracts that Northland is currently developing. This LNTP will lead to a fully executed “turn-key” contract, or Full Notice to Proceed (FNTP) in the very near future.

For the four northern 10 MW solar projects, and the related transmission line, NPI is currently conducting an Expression of Interest (EOI), and has contacted 8 well known, large contractors with experience working in Ontario; this includes Miwel. These contractors all have sufficiently large balance sheets to meet NPI’s stringent contract requirements (i.e., bonding, insurance, liquidated damages provisions, etc.). Once the EOI exercise is complete, and after NPI reviews submissions, NPI will short list the contractors and go through a competitive request for proposal /

bidding process to select a successful contractor. It is anticipated that NPI will award LNTP to a successful contractor in late May or early June, in order for detailed engineering to be completed and major equipment to be ordered. A final EPC contract is expected to be awarded before the end of June.

CONNECTION AGREEMENTS BETWEEN THE APPLICANTS AND HYDRO ONE NETWORKS INC. ("HONI")

Interrogatory 2

[Note: the Applicants are expected to communicate with HONI and the answers are expected to reflect HONI's views to all questions in this interrogatory]

References:

- (a) Exh. B/Tab 1/Sch. 1/p. 1/par. 4
- (b) Transmission System Code ("TSC"), June 10, 10/Section 4.1.1 and Appendix 1-Version B, Form of Connection Agreement for Generator Customers

Preamble:

At Reference (a), it is stated in part that:

"The Applicants have a co-ownership agreement in place for the transmission line and associated facilities[.]. The Applicants will be entering into an operation and maintenance agreement ("O&M Agreement") with NPI for the operation and maintenance of the Transmission Facilities."

At Reference (b), at Section 4.1.1 of the TSC it is required that HONI enters into a connection agreement with customers directly connected to its transmission system, which for generator customers, the Form of which is provided in Appendix 1, Version B of the TSC.

Questions/Requests:

- (i) Given that the transmission line is owned by the four Applicants, please clarify whether or not each of the four Applicants will conclude a connection agreement with HONI.
- (ii) If the answer to (i) above is affirmative, please indicate the status of these connection agreements with HONI.
- (iii) If the answer to (i) above is that the Applicants are not pursuing four connection agreements with HONI, please explain how the TSC's requirements and provisions would be binding on all four solar generation projects?

Response:

The Applicants have contacted HONI as requested by Board Staff in order to obtain HONI's views on all the questions in this interrogatory.

- (i) The Applicants will be connecting to C2H by way of Calder SS. Calder SS is jointly owned by the Applicants. Based on the foregoing, HONI has advised the Applicants as follows:

“Subject to there being no change in the ownership structure of Calder SS (and tap line) ... there would only be one (1) Connection Cost Recovery Agreement (“CCRA”) and one (1) Transmission Connection Agreement (“TCA”). The CCRA and TCA would be between Hydro One and Northland Power Solar Empire L.P., Northland Power Solar Martin’s Meadows L.P., and Northland Power Solar Abitibi L.P. and Northland Power Solar Long Lake L.P who would be collectively the “Customer” under the terms of both agreements and Hydro One would include terms in both the CCRA and the TCA similar to what is in the Multi-party CCEA regarding the joint and several liability of the parties that collectively comprise the Customer irrespective of the ownership of any of the other assets.”

- (ii) There is no connection agreement with HONI at this time. The Applicants anticipate entering into the above described connection agreement with HONI at a later stage in the development process.

UPDATE STATUS OF CROSSING AGREEMENT, ROAD USER'S AGREEMENT AND WORK PERMITS

Interrogatory 3

Reference: Exh. C/Tab 1/Sch. 1/pp. 2-3

Requests:

- (i) Please provide update on any of the six crossing agreement which are still outstanding (listed at page 2 of the above Reference).
- (ii) Please provide update on the status of on the Road User's Agreement with the Town of Cochrane referred to at pages 2 and 3 of the above Reference.

Response:

- (i) The six crossing agreements and their current status are as follows:
 - (a) Ontario Northland Railway (ONR):
 - engineering approval received on December 12, 2012
 - NPI is still waiting on the proposed form of crossing agreement from ONR's legal department.
 - NPI has contacted ONR on several occasions, most recently on April 22, requesting a draft form of crossing agreement.
 - (b) Frederick House River (MNR):
 - the MNR was provided with the preliminary drawings of the proposed crossing for review and the Applicants have been advised that a Work Permit will be considered and applications will be processed by the MNR upon the MOE approving the REA;
 - Northland engaged and directed Hatch Engineering to pursue/process the work permit application on its behalf with the MNR on March 21.
 - Hatch is working directly with the regional MNR office in Cochrane and submitting proposed preliminary engineering drawings for the transmission line route and infrastructure that is to be located on Crown land. The MNR's main area of interest is with respect to the proposed water crossings, and whether permanent trails will be constructed in the unopened road allowances under its jurisdiction
 - (c) Algonquin Power 115 kV Transmission Line:

- Algonquin was provided with drafts of the proposed overhead crossing on November 29, 2012
- NPI requested updates or feedback from Algonquin on March 6 and April 23, 2013.
- Algonquin replied April 23 asking when NPI needs the agreements finalized
- NPI's response was ASAP. NPI requested that these agreements be finalized prior to construction commencement this summer (July 2013). - therefore, by the end of June 2013.

(d) H2O Power LP 115 kV Transmission Line:

- H2O Power was provided with drafts of the proposed underground cable crossing on November 29, 2012, and a response was provided on the same day indicating that the crossings are acceptable to H2O Power;
NPI followed up on April 23, 2013 and H2O Power indicated that it is conducting final review and will be getting back to NPI shortly.

(e) MTO Highway 668 (Encroachment Permit EC-2012-53C-20:

- approved on December 16, 2012

(f) HONI Transmission Line:

- Northland Power Solar Empire L.P., Northland Power Solar Martin's Meadows L.P., and Northland Power Solar Abitibi L.P. own the portion of the transmission which will be crossing HONI's transmission line, and as a result, will be entering into an agreement with HONI.
- HONI advised the Applicants that it will produce a list of requirements for the crossing, as is standard for any crossing agreement. In addition, HONI advised the Applicants that it would not be completing the work necessary for the crossing and the Applicants will therefore undertake to complete this work.
- Lana Kegel, Real Estate Coordinator, Real Estate Services, Hydro One Networks Inc., Tel 905-946-6277, Lana.Kegel@hydroone.com, contacted NPI on March 28 requesting the following information:
 - Legal descriptions of the lands
 - Plan and profile of the duct bank
 - An aerial of the proposed crossing
 - Detailed surveys indicating the location of HONI towers

- The Applicants provided a detailed response on April 7, 2013.
 - HONI advised the Applicants on April 17 that conditional approval for the underground cable crossing has been approved, subject to HONI's terms and conditions.
 - The Applicants provided the name of its designated signing officer for the agreement and are awaiting a copy of the agreement from HONI. The agreement has been described to the Applicants as being the "Construction and Encroachment Agreement for this proposal within our Easement".
- (ii) Additionally, a Road User's Agreement is to be entered into between the Applicants and the Town of Cochrane.
- Draft of Road Use Agreement (RUA) provided to Town of Cochrane on August 16, 2012.
 - NPI received Town of Cochrane's comments on draft January 16, 2013.
 - Revised draft, incorporating the majority of the Town's comments and requests was submitted by NPI to the Town on March 25, 2013.
 - The (draft) agreement has been sent back to the Town for review and approval by Council.

LAND OWNER AGREEMENTS

Interrogatory 4

Reference: Exh. F/Tab 1/Sch. 1/pp. 1 - 4

Preamble:

At page 1 of the noted Reference, it is stated in part that:

“Approximately 22 km of the transmission line will be above ground. The Applicants (through NPI) currently hold options for all of the land rights required for the private properties where project components are to be located, except for the Calder SS. Negotiations are ongoing for privately owned land for the Calder SS.[underlining added for emphasis]

Draft agreements (options to lease) have been forwarded to the landowner for the Calder SS site. Verbal discussions and negotiations have progressed well, and basic terms and conditions have been agreed to verbally. The location of the Calder SS is on the south side of Concession 8&9, west of Highway 668 (see map at Exhibit B, Tab 2, Schedule 2).

It will be necessary to cross Highway 668 with a short underground cable (approximately 350 metres in length). The section of underground cable will rise for termination into the Calder SS. The Applicants have received an Encroachment Permit EC-2012-53C-20 from the Ontario Ministry of Transportation (“MTO”) (see Exhibit F, Tab 1, Schedule 2).

A table summarizing the lands required for the Transmission Facilities and the instruments granting the Applicants access to such lands can be found in Exhibit F, Tab 1, Schedule 1. The forms of agreements in relation to the lands can be found in Exhibit F, Tab 1, Schedule 2 of this Application.”

Questions/Requests:

(i) Please clarify whether the table titled “LANDS REQUIRED FOR TRANSMISSION FACILITIES” and is listed on pages 3 and 4 of above Reference, includes all directly affected landowners (i.e. Transmission Line infrastructure will be located on their property)? Please update the table if necessary.

(ii) Please provide an update on the negotiations with the land owner in regard to the Calder SS.

Response:

- (i) Yes, the table includes all of the affected landowners and no update is required.
- (ii) The negotiations with the landowner for the Calder SS have been finalized and NPI has an option to lease the property for the Calder SS, the transmission line from the Long Lake solar development, and the section of the underground cable. A lease was executed on March 6, 2013. An amendment changing the lease from the estate of the former owner of the property to the current owner was executed by NPI on April 10, 2013 and forwarded to the owner's solicitor for final signature on April 11, 2013. The form of lease is the same as that provided in Exhibit F, Tab 1, Schedule 2 of the Application.

COST RESPONSIBILITY FOR STRANDED ASSETS & DECOMMISSIONING

Interrogatory 5

References: Exh. B/Tab 4/Sch. 1/p. 1

At the above Reference, it is stated that:

“The proposed Transmission Facilities are to be used solely to connect the Generation Projects to the transmission system. The Applicants will therefore not be licensed or rate-regulated transmitters. The financial risk of constructing, owning, and operating the Transmission Facilities will lie solely with the Applicants.”

Questions/Clarifications:

- (i) In regard to the above Reference, please acknowledge the Applicants' responsibility for removing the transmission and related facilities if construction of these transmission facilities does not proceed or is interrupted due to unforeseen events such as the inability to acquire or secure the various permits or due to a force majeure event?
- (ii) Did the Applicants set aside funds to address the events outlined in (i) above leading to stranded assets and for decommissioning, or alternatively guaranteed by any other means? Please provide details.

Response:

- (i) The Applicants acknowledge their responsibility for removing and decommissioning the transmission and related facilities if construction of these transmission facilities does not proceed or is interrupted due to unforeseen events such as the inability to acquire or secure the various permits or due to a force majeure event. The Applicants' pending REA approval will also include a decommissioning requirement, as per the Decommissioning Plans that were prepared and submitted as part of the Applicants' REA submission. A copy of the REA application can be found on the Applicants' project websites as follows:

Cochrane <http://cochrane.northlandpower.ca/>

Long Lake <http://longlake.northlandpower.ca/>

- (ii) No, the Applicants did not set aside funds to address decommissioning, nor is this activity guaranteed by other means. NPI has the financial means to remove and decommission the transmission facilities if this is required. Furthermore, when or if the solar developments are decommissioned there will be salvage value of the equipment and materials located on the sites.

CONNECTION AND COST RECOVERY AGREEMENT (“CCRA”)

Interrogatory 6

Reference: Exh. B/Tab 1/Sch. 1/p. 6/par. 18

At the above Reference it is stated that:

“The tapping arrangement to HONI circuit C2H will be determined in consultation with HONI, following the execution of the HONI Connection and Cost Recovery Agreement (“CCRA”). Calder SS will contain all equipment necessary to join Segment A and Segment B of the new 115 kV transmission line to the outgoing HONI line tap.[..]”

Request:

- (i) In regard to the above Reference, please submit the Connection Cost Recovery Agreement (“CCRA”), when finalized.

Response:

- (i) The Applicants commit to submitting a copy of the executed CCRA with HONI as soon as it is finalized.

TRANSMISSION SYSTEM UPGRADES

Note: This interrogatory requires that the Applicant ask Hydro One Networks Inc. to respond to the Requests below to be filed to meet the deadline for Interrogatory Responses.

Interrogatory 7

Reference: Exh. H/Tab 1/Sch. 2- System Impact Assessment Report (Addendum) Final Report, May 15, 2012/pages 1 and 2

Preamble:

At the above Reference, it is stated in part that.

7. Pre-contingency thermal overloads exist on the 115 kV circuit H6T before and after the connection of the projects. Hydro One plans on upgrading both the H6T and H7T circuits to help alleviate these overloads.

8. Post-contingency thermal overloads of 115 kV circuits H6T and H7T exist before and after the connection of the project for the loss of the Ansonville T2 autotransformer and the inadvertent breaker operation (IBO) of the 115 kV H1L91 circuit breaker.

9. Post-contingency overvoltage issues exist before and after the connection of the projects. These issues occur for the loss of the 500 kV circuit P502X without the rejection of new and existing capacitor banks at Hanmer TS and Porcupine TS. Hydro One plans to develop a switching scheme which will automatically disconnect appropriate capacitor banks to mitigate these issues, as outlined in the Addendum completed for the Northern Ontario Shunt Caps SIA report (CAA 2008-352).

Requests:

- (i) Please obtain from HONI the time line for upgrading circuits H6T and H7T to address the noted overloads on these two circuits as outlined in paragraphs 6 and 7 of the above Reference.
- (ii) Please obtain from HONI the time line for its developing a switching scheme to address the Post-contingency overvoltage issues as outlined in paragraph 9 of the above Reference.

Response:

The Applicants made the requested inquiries of HONI, and HONI's response received by email April 18, 2013 was as follows:

“The Northland Power solar farm connection is NOT contingent on these circuit (H6T and H7T) upgrades being completed.

However, the thermal issues identified in the SIA on the H6T/H7T circuits will be resolved with another Hydro One investment, and will be completed prior to Northland Power I/S date.”

In a subsequent e-mail response, HONI agreed and committed that the upgrade on H6T/H7T, as listed in SIA/CIA, will be completed by September 2014, which is the solar projects' in service date.

RENEWABLE ENERGY APPROVALS

Interrogatory 8

Reference: Exh. C/Tab 1/Sch. 1/p. 2/para. 1/Critical Constraints

Preamble:

At the above Reference, it is stated in part that.

The Ministry of Environment (“**MOE**”) Renewable Energy Approvals (“**REA**”) for the Generation Projects and Transmission Facilities were filed at the end of October, 2012 and beginning of November, 2012. As such, based on the MOE’s three month service guarantee, the Applicant anticipates receiving MOE approval of each REA by the end of June, 2013.

Questions:

- (i) Based on the noted “MOE’s three-month service guarantee”, did the Applicants receive a decision from the MOE in relation to its REA application?
 - a. if response is yes, please file the evidence in regard to the REA approval; or
 - b. if response is no, is a decision still expected by end of June, 2013 as stated above?
- (ii) Have there been any objections to the granting of the REA and if so by which parties?
- (iii) Upon completion of the environmental assessment, please file a copy of the REA approval.

Response:

- (i) a) A typographical error was made and further clarification is required. The MOE’s stated service guarantee to approve REA submission is six months and not three months as stated.

Renewable Energy developers participating in the FIT Program must make REA submissions to the MOE. Once all of the required studies and reports have been completed, and the minimum of two Public Information Centres (PICs) have been held, developers make their REA submissions to the MOE. After the MOE receives these submissions it reviews the applications for “completeness”. The MOE has a “service target” of 40 business days to deem applications complete; however, experience has shown that it takes the MOE considerably longer to deem applications complete. Most developers estimate that the MOE will take approximately 2 months to deem an application complete.

Once an application is complete, the MOE's formal or official REA approval process begins, with the 6-month service guarantee. Therefore, from start to finish (REA submission to approval) can take up to 8 months. However, it should be noted that, based on the circumstances, the MOE can approve REAs in less than 8 months total.

The Applicants' Long Lake REA submission was made on October 24, 2012 and deemed officially complete on February 14, 2013.

The Applicants' Abitibi, Empire, and Martin's Meadows applications were made on October 31, November 4, and November 7, 2012, respectively. Subsequent to these submissions, the Applicants met with the MOE on January 16, 2013. The MOE later advised the Applicants that it recommended the Applicants withdraw, amend, and resubmit the Abitibi, Empire, and Martin's Meadows applications as one submission. The Applicants were told that this would expedite and facilitate the MOE's review and approval process. The Applicants withdrew and amended their REA application and resubmitted it as the "Cochrane" REA submission on February 22, 2013. This (Cochrane) REA submission was deemed complete on April 19, 2013.

b) No, REA approvals are no longer expected in June 2013. Considering the above, and if the MOE does take the full 6 months to approve the REA applications, the approval dates will be August 15, 2013 for Long Lake and October 19, 2013 for Cochrane. However, the applicants are hopeful that the MOE will approve the REAs by mid-August at the latest because the MOE provided a verbal commitment to NPI that the withdrawal of the 3 applications (Abitibi, Empire, and Martin's Meadows), amendment, and refilling as 1 (Cochrane) application would facilitate and expedite the review and approval process. The MOE understands that NPI would like all 4 projects, or the 2 REA submissions approved at the same time.

- (ii) As stated in Exhibit G, Tab 1, Schedule 1 of the Application, several residents along the west Shore of Lower Deception Lake, identifying themselves as the Hunta Area Landowners Association ("HALA"), raised concerns and wrote a letter about the transmission line, primarily along the southern shore of Lower Deception Lake. As a result of this letter, and to directly address the comments, questions, and concerns raised by the HALA group, the Applicants dedicated the majority of the third PIC to the transmission line. Furthermore, at PIC 3, the Applicants committed to putting a restrictive covenant on title that would control tree cutting along the south shore of Lower Deception Lake on these privately owned lands in order to mitigate any possible or potential visual impact that the transmission line might create. This explanation and these efforts were acknowledged by the local stakeholders and HALA. No further comments were received from local stakeholders or HALA in this regard. To the

Applicants' knowledge there have been no further objections to the granting of the REA.

- (iii) The Applicants will submit copies of the REA approvals as soon as they are received.