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May 27, 2013

Delivered by Email and Courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
26th Floor, Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Application for Leave to Construct - EB-2013-0047

- **Northland Power Solar Empire L.P.**
- **Northland Power Solar Martin's Meadows L.P.**
- **Northland Power Solar Abitibi L.P.**
- **Northland Power Solar Long Lake L.P.**

We are counsel to 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") in the above captioned matter.

At pages 3-4 of Exhibit B, Tab 1, Schedule 1 of the Application, the Applicants described the Main Transformer Substation, one of the transmission facilities that are the subject of this Application. We are reproducing the relevant paragraphs from Schedule 1 here for the Board's convenience:

• **The Main Transformer Substation**

12. The Main TS is located on the Martin's Meadows Generation Project site. More particularly, the Main TS will be located on the north-west corner of Martin's Meadows site, within Glackmeyer Township, Lot 1, Concession 8. The Main TS will include three (3) transformers, each transformer with a proposed peak capacity of 12 MVA, for the purposes of stepping up generation from the Martin's Meadows, Abitibi and Empire Generation Project sites from 27.6 kV, the nominal voltage of the medium voltage collector system, to 113-132 kV, the voltage required for connection to the HONI transmission system. The Main TS will include breakers, switches, metering, protections, controls, SCADA and auxiliary equipment required for safe and reliable operation of medium and high voltage facilities of the Generation Projects and the new 115 kV transmission line (Segment A). The Main TS will also include three (3) sets of IESO revenue metering equipment, one set for each of the Martin's Meadows, Abitibi and Empire Generation Projects. The Main TS will include perimeter fencing, which will comply with the requirements of the Ontario Electrical Safety Code.
13. For economic, operations and maintenance reasons, the Applicants are considering amending their current SIA and CIA, to allow the Applicants to combine the energy generated by the Martin's Meadows, Abitibi and Empire Generation Projects sites at the 27.6 kV bus of the Main TS. This would allow the Applicants to explore a reduction in the required number of step-up transformers from three (3) down to a single unit. The Applicants may select this alternative and if so, the Applicants will pursue an amendment to the existing

SIA and CIA with the IESO and HONI respectively to reflect the new arrangement. For greater clarity, this alternative will not result in a change in location of the Transmission Facilities.

The Applicants confirm that they have decided to combine the energy generated by the Martin's Meadows, Abitibi and Empire Generation Projects sites at the 27.6 kV bus of the Main TS, and to reduce the required step-up transformers from three to one as contemplated in the Application. Please find accompanying this letter a copy of the the IESO's May 20, 2013 Draft 2nd Addendum to its System Impact Assessment Report. At page 1 of the Draft 2nd Addendum, the IESO states (in part):

"Northland Power (the "connection applicant") has updated their connection proposal of the Martin's Meadows, Abitibi and Empire sites to replace their three individual 115-27.6 kV step up transformers with a single higher rated transformer connecting all three sites.

The IESO and Hydro One have examined the proposed change and concluded that it is not materially different from the first Addendum's application data, as the equivalent impedance of the new transformer is similar to that of the three single transformers previously assessed.

...

The IESO recommends that a Notification of Conditional Approval for Connection be issued for the proposed connection of Northland Power Solar Long Lake, Abitibi, Martin's Meadows and Empire, operating up to 40MW, subject to implementation of the requirements outlined in the previous SIA reports."

The Applicants trust that this will not affect the Board's timeline for the processing of the Application, pursuant to which IESO and Board staff submissions are due on or before Friday, May 31, 2013; and the Applicants' submissions, with input from HONI as necessary, are due on or before Monday, June 10, 2013.

Should you have any questions in this regard, please do not hesitate to contact me.

Yours very truly,

BORDEN LADNER GERVAIS LLP

Per:

Original Signed by James C. Sidlofsky

James C. Sidlofsky

Encl.

Copy to: Tam Wagner, IESO

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REPORT

System Impact Assessment Report (2nd Addendum)

CONNECTION ASSESSMENT & APPROVAL PROCESS

Draft Addendum

CAA ID: 2010-403/406/408/409

**Project: Northland Power Solar Martin's Meadows,
Abitibi, Long Lake and Empire**

**Applicant: Northland Power Solar Martin's Meadows,
Abitibi, Long Lake and Empire L.P.**

Market Facilitation Department
Independent Electricity System Operator

Date: May 20th, 2013

Document Name	System Impact Assessment Report (Addendum)
Issue	Draft Addendum
Reason for Issue	First Issue
Effective Date	May 20th, 2013

Proposed Changes

This addendum updates the System Impact Assessments and the first System Impact Assessment Addendum for “Northland Power Solar Martin’s Meadows, Abitibi and Empire” (CAA ID 2010-403,406,409) and “Northland Power Solar Long Lake” (CAA ID 2010- 408) (the “projects”) originally issued in January, 2011 and May, 2012 for the connection of new solar power generation farms in Cochrane, Ontario and Hunta, Ontario.

Northland Power (the “connection applicant”) has updated their connection proposal of the Martin’s Meadows, Abitibi and Empire sites to replace their three individual 115-27.6 kV step up transformers with a single higher rated transformer connecting all three sites.

The IESO and Hydro One have examined the proposed change and concluded that it is not materially different from the first Addendum’s application data, as the equivalent impedance of the new transformer is similar to that of the three single transformers previously assessed.

Notification of Conditional Approval

The IESO recommends that a *Notification of Conditional Approval for Connection* be issued for the proposed connection of Northland Power Solar Long Lake, Abitibi, Martin’s Meadows and Empire, operating up to 40MW, subject to implementation of the requirements outlined in the previous SIA reports.

Transformer Data

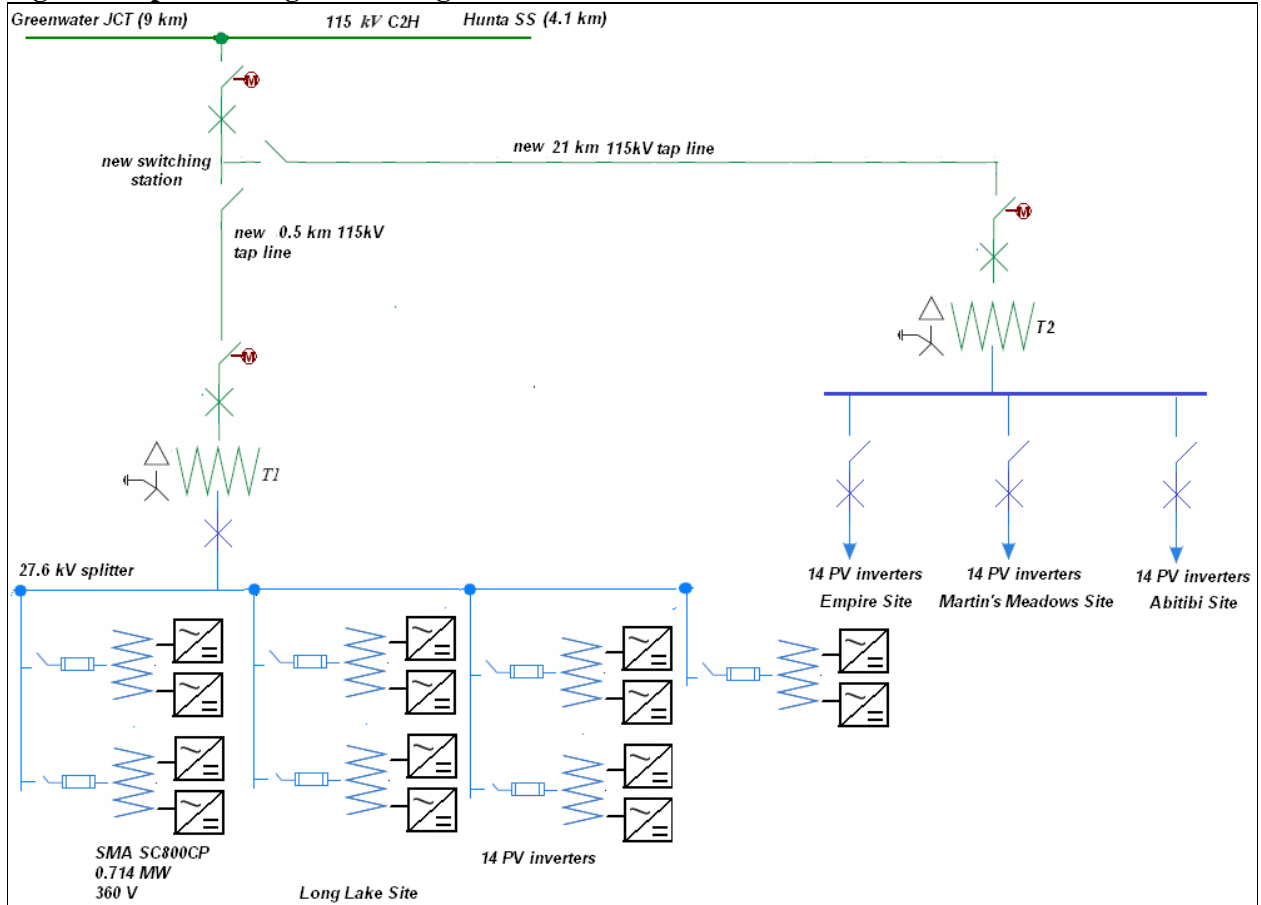
Table 1: Previous step-up transformers’ data

# of Units	Transformation	Rating (MVA) (ONAN/ONAF/ONAF)	Positive Sequence Impedance (pu) SB= 9 MVA	Configuration		Taps
				HV-Side	LV-Side	
3	115/27.6 kV	9/12 MVA	j0.09	Delta	Yg	ULTC@ HV 17 steps, 114-136 kV

Table 2: New step-up transformer data

# of Units	Transformation	Rating (MVA) (ONAN/ONAF/ONAF)	Positive Sequence Impedance (pu) SB= 27 MVA	Configuration		Taps
				HV-Side	LV-Side	
1	115/27.6 kV	27/36 MVA	j0.09	Delta	Yg	ULTC@ HV 33 steps, 98-132 kV

Figure 1 shows an updated single line diagram of the project reflecting the changes identified in this Addendum.

Figure 1: Updated Single Line Diagram

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