

## BY EMAIL AND RESS

March 15, 2022 Ms. Christine E. Long Board Secretary Ontario Energy Board Suite 2700, 2300 Yonge Street P.O. Box 2319 Toronto, ON M4P 1E4

Re: EB-2020-0150, Compliance with Minimum Technical Requirements and Commissioning

Dear Ms. Long:

Pursuant to the Board's Decision and Order, EB-2020-0150 at 5 (June 17, 2021), NextBridge Infrastructure LP ("NextBridge") hereby submits this cover letter and the accompanying attached letters demonstrating compliance with the following directives ("Directives"):

One exception is the requirement that NextBridge obtain confirmation that the design of the East-West Tie line meets the minimum technical standards set out in the designation proceeding by the OEB. This requirement was included in a decision from the previous leave to construct proceeding, where the OEB stated that 'the successful applicant will be required to provide a formal sign-off and approval from a Professional Engineer in Ontario ensuring compliance of its project's technical specifications and design with the OEB's minimum technical requirements/standards outlined in the Designation Process.' The OEB is directing NextBridge to conform with this requirement. This confirmation shall be filed by NextBridge as part of its filing with the OEB to demonstrate when the line is placed in service.

Finally, once the East-West Tie line is ready to be placed in service, NextBridge is expected to file a third-party independent engineering study to delineate the end of commissioning.

NextBridge oversaw the contracting engineers' compliance with the minimum technical requirements set out in the designation proceeding by the Board entitled "OEB Minimum Technical Requirements for the Reference Option of the E-W Tie Line" ("MTR") dated November 9, 2011. To show compliance, attached are letters from NextBridge's consultants, each executed by a professional engineer in Ontario, confirming compliance with the MTRs. Collectively, the letters demonstrate that the East-West Tie Line meets the minimum technical standards established in the designation proceeding by the Board. The overall line design was performed by Burns & McDonnell and generally covers all line design related MTR as set forth in Section 3. The foundation design was performed by Valard Engineering which

covers foundation specific requirements in Section 3.6 and generally all foundation in the MTRs. The tower design was performed by TDI/G-Tower which covers the specific tower design requirements in Section 3.6 and general structure design in the MTRs. The grounding design was performed by Kinectrics in Section 3.7 and general grounding and bonding related items in the MTRs.

These letters collective also constitution a third-party independent engineering study to delineate the end of commissioning, as the East-West Tie Line, which ends outside of each of the Hydro One Networks' ("HONI") stations, is ready to be energized. Therefore, any additional testing prior to in-service of the East-West Tie Line with HONI's substations will be conducted by HONI. The projected in-service date continues to be on or before March 31, 2021.

Accordingly, the letters the MTRs and the commissioning of the East-West Tie Line demonstrate compliance as required by the Directives.

Sincerely,

Jennifer Tidmarsh NextBridge, Project Director

Aziz S. Brott PE NextBridge Project Engineer

Attachments

Digitally signed by Jennifer Tidmarsh Date: 2022.03.15 13:22:31 -04'00'

Digitally signed by Aziz Brott DN: cn=Aziz Brott, o, ou, email=aziz.brott@nee.co m, c=US Date: 2022.03.15 11:54:14-06'00'





March 9, 2022

191002

Date:

**Project:** 

## LETTER OF CONFORMANCE

To:

NextBridge Infrastructure

2200 Yonge Street, Suite 1712

Toronto, ON M4S 2C6

Attention:

Aziz Brott, P.E.

Transmission Project Engineering Manager

Re:

Ontario East-West Tie Transmission Line Project

Structural Design of Transmission Line Towers - Letter of Conformance

Mr. Brott,

TransDesign International, LLC and G-Tower have completed the structural design review of towers and their associated PLS-TOWER models for the Ontario East West Tie Line project.

Please accept this letter as the formal sign-off on the structural design of towers by a Professional Engineer registered with the Professional Engineers Ontario, ensuring compliance with the project's technical specifications and design with the Ontario Energy Board's *Minimum Technical Requirements for the Reference Option of the E-W Tie Line*.

We trust that this Letter of Conformance is to your satisfaction. Please do not hesitate to contact our office if there are any questions relating to this letter.

Respectfully,



Ali Gulgeze, M.Eng., P.Eng. Managing Director

G-Tower, Inc. 223 Deane Avenue Oakville, ON L6K 1N6, CANADA www.g-tower.com A2

Amado Lizarraga, P.E. President

TransDesign International, LLC 16955 Walden Rd. Suite, 107 Montgomery, TX 77356 (USA) www.transdesignllc.com



March 11, 2022

Aziz Brott, P.E. Transmission Project Engineering Manager NextBridge Infrastructure 2200 Yonge Street, Suite 1712 Toronto, ON M4S 2C6

Re:

Ontario East-West Tie Transmission Line Project

Letter of Conformance

Mr. Brott:

Per your request, and pursuant to the contract between NextBridge Infrastructure LP ("NextBridge") and Burns & McDonnel Canada, Ltd, ("Burns & McDonnell") effective March 7<sup>th</sup>, 2014, ("Contract"), and Exhibit B with regards to the project, please accept this Letter of Conformance.

Burns & McDonnell confirms that to our information and knowledge, our engineering design activities with regards to the East-West Tie Line conform with the requirements set forth by the Ontario Energy Board in the *Minimum Technical Requirements for the Reference Option of the E-W Tie Line* as prescribed in the Burns & McDonnell's Contract for services with NextBridge.

We trust that this Letter of Conformance is to your satisfaction. Should you require any further information or clarification, please do not hesitate to reach out to our office.

Respectfully,

Burns & McDonnell Canada LTD

By:

Chih-Hung Chen, P.E., P.Eng

Project Engineer



Amin El Gendy, Ph.D., P.Eng., PMP Civil Engineering Manager Valard Engineering 10774 42 Street SE Calgary, AB T2C 0L5

March 14, 2022

Aziz Brott, PE Project Engineer NextBridge Infrastructure 16 Ganley Street Wawa, ON POS 1KO

## **Completion of Foundations for Ontario East West Tie Line**

Mr. Brott,

Valard has completed the review of all foundation design, installation, testing, RFIs and control documents for the Ontario East West Tie Line (EWT) project. Based off this review Valard can state that the construction of the foundations is in conformance with the design.

Please accept this letter as formal sign-off by a Professional Engineer registered with the Professional Engineers Ontario, ensuring EWT's compliance with the Ontario Energy Board in the Minimum Technical Requirements for the Reference Option of the E-W Tie Line.

Please do not hesitate to contact myself or my office if there are any questions relating to this letter.

Regards,



2022-Mar-14

Amin El Gendy PhD, P.Eng., PMP Civil Engineering Manager

CC:

Drew Williams Kelly Williams Brett Smit



Date: March 14, 2022

From: Kinectrics Inc., Dave Clarke, Senior VP, Transmission and Distribution Technologies.

To: Aziz S. Brott, PE NextBridge Infrastructure LP

Subject: Lightning Performance Compliance of East-West Tie (EWT)

Kinectrics Inc., (Kinectrics) is a testing, inspection, certification, and consulting company focused on electrical utility needs. Kinectrics supported NextBridge Infrastructure, LP to design a lightning protection system for the East-West Tie Line (EWT) as required by the Ontario Energy Board in the Minimum Technical Requirements for the Reference Option of the E-W Tie Line.

The OEB minimum technical requirements [1] for the EWT include:

- Single-circuit lightning performance goal of < 3.0 outages per 100 miles per year</li>
- Multi-circuit performance goal of < 1.0 multi-circuit outages per 100 miles per year</li>

The lightning protection system of EWT double circuit 230 kV transmission line includes a combination of Externally Gapped Line Arresters (EGLA) on all phases of one circuit at every tower, and electrical bonding to overhead groundwires, foundation elements and guy anchors. High frequency impedance testing was performed as part of the commissioning process to verify the design assumptions.

Therefore, Kinectrics confirms that the lightning protection systems installed on the EWT will satisfy the minimum lightning performance requirements outlined by the OEB.

Sincerely,

Dave Clarke, P.Eng.

Senior Vice President, Transmission and Distribution Technologies

800 Kipling Avenue - Unit 2, Toronto, ON, M8Z 5G5

Telephone: 416-207-6539

Cell: 647-921-6374

E-Mail: Dave.Clarke@Kinectrics.com

## References

[1] "Minimum Technical Requirements for the Reference Option of the E-W Tie Line", Ontario Energy Board, 9 November 2011, 32pp.

