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October 14, 2016
File No. 136435-1001

National Energy Board
517 Tenth Avenue SW
Calgary, AB
T2R 0A8

Attention: Ms. Sheri Young, Secretary of the Board

Dear Ms. Young:

Re: ITC Lake Erie Connector LLC (ITC)
Lake Erie Connector Project (Project)
Application dated 22 May 2015
Board File OF-Fac-IPL-1175-2015-01-02
General Update

Further to our letter to the Board of August 2, 2016, we attach an updated Project construction schedule which supersedes that included in Appendix A (Figure 14) of ITC's Election Certificate Application ("Application") filed on May 22, 2015 which now reflects a targeted in-service date of Q4 2020. Also attached are minor modifications to Section 4.4.1 of the Application to reflect the Q4 2020 in-service date.

As design of the Project has progressed, we are also now able to provide the Board with a more detailed description of the equipment and method of cable installation that will be used in the soft sediment in Lake Erie in the kilometre post (KP) range of KP15-KP 55.

Updated Project Schedule

As detailed in the updated schedule and amended Section 4.4.1, the construction and in-service dates will generally be delayed by one year. Some minor adjustments to the pre-construction schedule have also been identified.

It is anticipated that the required pre-construction permits and approvals will be received by Q2 2018. Construction will be initiated in Q2 2018, with commissioning and commercial operation targeted for Q4 2020.

If required, the next major schedule update would be undertaken in 2017 following completion of detailed design.

Updated Description of Underwater HVDC Cable Installation in Soft Sediment

A description of the Project, including an overview of the Project location and details of the Project components and activities, was completed as part of the Application. As the Board is aware, since submission of the Application, additional studies were completed resulting in some minor adjustments to the installation methods for the high-voltage direct current (HVDC) cable.

The depth and nature of the sediments between KP15 to KP55 (the Canadian/US border is at approximately KP47) identified in the Lake Erie Connector Marine Geophysical Survey Results Report submitted to the NEB on January 29, 2016, resulted in the need to modify the method of cable installation in the lake bed along this segment of the route. Between KP15 and KP55 along the underwater HVDC cable route, the load bearing capacity of the lake bed is insufficient to support jet plow installation.

The alternative method to be used to install the underwater HVDC cable between KP15 and KP55 is by post-lay burial Remote Operated Vehicle (ROV) with water jets. This method of underwater HVDC cable installation was described in Attachment 4 to ITC Lake Erie's Supplementary Evidence submission on February 26, 2016 (Addendum to National Energy Board Election Certificate Application Section 4.0 – Project Description and Engineering). Additional details of the planned underwater HVDC cable installation were provided to the NEB in ITC Lake Erie's Response to IR No. 5A on July 11, 2016.

The potential effects of the underwater HVDC cable installation by ROV water jetting methods were examined and integrated into the water quality model and net effects assessments, and it was determined that no changes to the conclusions of the assessments were required. The adjusted water quality model results were provided to the NEB as Attachment 8 of ITC Lake Erie's response to IR No. 3 on January 29, 2016 (Water Quality Modeling Addendum). The adjusted net effects assessment was provided to the NEB as Attachment 2 to ITC Lake Erie's Supplementary Evidence submission on February 26, 2016 (Addendum to Net Effects Assessment).

In sediments that can support a jet plow, the underwater HVDC cable will be buried to a target depth of 2 m below the lakebed using a jet plow as described in the Application and as noted in ITC's Response to NEB IR No. 5.A.3, depth of cable burial will be monitored and confirmed during installation.

In sediments that are too soft to support the jet plow, the ROV will bury the cable approximately 2 m below the lakebed using 2 m jetting spears and a 2 m depressor arm. It is anticipated that the burial depth can be achieved within two ROV burial passes. While state of the art remote depth sensing technology at 25 Hz is unable to detect burial depths greater than approximately 1 m, a burial record can be established using mechanical contact between the cable and the ROV depressor arm ensuring the cable is buried at an appropriate depth.

The use of the jetting spears and depressor arm are not expected to result in changes to the previously assessed net effects; consequently, no changes are required to the conclusions of the effects assessments. The use of the depressor arm will ensure the cable is buried at the target depth (i.e., 2 m) in an efficient manner.

Kindly note that the field work for the Stage 4 Archaeological Assessment for the Haldimand Converter Station site has experienced a number of weather-related delays. We anticipate being able to file the report with the Board by mid-November.

Please contact me if you have any questions with respect to this matter.

Yours truly,

Patrick Duffy

PD/il

cc: All Intervenors
Andrew Jamieson, *ITC Holdings Corp.*
Glenn Zacher, *Stikeman Elliott LLP*
Ryan Doyle, *HDR*
Janine Ralph, *HDR*

ID	Task Name	Duration	Start	Finish
1	**LAKE ERIE CONNECTOR**	**2179 days**	**01 Jun '13**	**30 Sep '21**
2	**US Permitting Schedule**	**568 days**	**15 Oct '14**	**15 Dec '16**
3	**Field/Desktop Studies**	**365 days**	**30 Oct '14**	**22 Mar '16**
4	**Terrestrial**	**275 days**	**30 Oct '14**	**17 Nov '15**
5	Wetlands Report	138 days	04 Nov '14	13 May '15
6	Phase 1A Cultural Resources Report	53 days	02 Mar '15	13 May '15
7	Soils Investigation for Stormwater/Sewage	271 days	30 Oct '14	11 Nov '15
8	Stormwater Management Plan	259 days	21 Nov '14	17 Nov '15
9	Erosion and Sediment Control Plan	259 days	21 Nov '14	17 Nov '15
10	Rare Plant Survey	63 days	27 Jul '15	21 Oct '15
11	**Aquatic**	**277 days**	**02 Mar '15**	**22 Mar '16**
12	Water Quality Modeling	39 days	30 Apr '15	23 Jun '15
13	Ice Scour	191 days	30 Jun '15	22 Mar '16
14	Thermal/Magnetic Modeling	80 days	02 Mar '15	19 Jun '15
15	Aquatic Survey	75 days	30 Jun '15	12 Oct '15
16	**Consultation**	**502 days**	**10 Nov '14**	**10 Oct '16**
17	**General Application Sections**	**306 days**	**17 Nov '14**	**15 Jan '16**
18	**Environmental Report**	**568 days**	**15 Oct '14**	**15 Dec '16**
19	**US DOE Presidential Permit**	**405 days**	**29 May '15**	**15 Dec '16**
20	**US Army Corps of Engineers/PA Joint Permit**	**383 days**	**30 Jun '15**	**15 Dec '16**
21	**NPDES Permit**	**545 days**	**17 Nov '14**	**15 Dec '16**
22	**Coastal Zone Management Plan Consistency Determination**	**313 days**	**30 Jun '15**	**08 Sep '16**
23	**PennDOT Highway Occupancy Permit; Railroad Occupancy Permit; Overweight Vehicle Permits**	**545 days**	**17 Nov '14**	**15 Dec '16**
24	**Municipal Permits and Approvals**	**545 days**	**17 Nov '14**	**15 Dec '16**
25	**Canadian Permitting Schedule**	**1284 days**	**01 Jun '13**	**30 Apr '18**
26	**Consultation**	**1198 days**	**01 Jun '13**	**29 Dec '17**
27	Public Consultation Plan	87 days	17 Nov '14	16 Mar '15
28	Public Consultation Round 1	414 days	01 Jun '13	31 Dec '14
29	Public Consultation Round 2	195 days	01 Jan '14	30 Sep '14
30	Aboriginal Consultation Rounds 1 and 2	393 days	01 Aug '13	31 Jan '15
31	Agency Consultation Round 3	150 days	05 Sep '14	01 Apr '15
32	Public Consultation Round 3	164 days	01 Oct '14	15 May '15
33	Aboriginal Consultation Round 3	75 days	01 Feb '15	15 May '15
34	Post-NEB Submission Consultation/Engagement	681 days	25 May '15	29 Dec '17

ID	Task Name	Duration	Start	Finish
35	**Technical and Supporting Studies**	**350 days**	**01 Sep '14**	**31 Dec '15**
36	Natural Environment Assessment	153 days	01 Sep '14	31 Mar '15
37	Stage 2 Archaeological and Cultural Assessment (Terrestrial)	120 days	01 Oct '14	16 Mar '15
38	Site and Routing Analysis (Terrestrial)	101 days	24 Oct '14	12 Mar '15
39	EMF Risk Assessment	87 days	17 Nov '14	16 Mar '15
40	Atmospheric/Air Assessment	136 days	25 Sep '14	01 Apr '15
41	Acoustic Assessment	93 days	10 Nov '14	17 Mar '15
42	Surface Water Assessment	99 days	27 Oct '14	11 Mar '15
43	Visual Impact Assessment	124 days	25 Sep '14	16 Mar '15
44	Geotechnical/Groundwater Assessment	135 days	24 Oct '14	29 Apr '15
45	Desktop Marine Route Survey (CSR Lead)	82 days	19 Nov '14	11 Mar '15
46	In-water Marine Route Survey and Stage 2 Marine Archaeology	47 days	10 Jan '15	16 Mar '15
47	Water Quality Model and Study	132 days	01 Sep '14	02 Mar '15
48	Environmental Effects Review	18 days	02 Mar '15	25 Mar '15
49	**NEB Election Certificate**	**142 days**	**07 Nov '14**	**22 May '15**
50	Project Description and NEB Submission	142 days	07 Nov '14	22 May '15
51	**Environmental and Socio-Economic Assessment**	**87 days**	**01 Jan '15**	**30 Apr '15**
52	**Preparation of NEB Submission**	**54 days**	**09 Mar '15**	**21 May '15**
53	**NEB Election Certificate - Recommendation and Approval**	**437 days**	**22 May '15**	**20 Jan '17**
54	**Other Canadian Pre-Construction Permits and Approvals**	**767 days**	**25 May '15**	**30 Apr '18**
55	Utility Crossing Agreements	591 days	30 Jun '15	02 Oct '17
56	IESO Connection Assessment and Approvals	591 days	30 Jun '15	02 Oct '17
57	Haldimand County, Municipal Act, Planning Act and Building Permits	741 days	30 Jun '15	30 Apr '18
58	Transportation Permits	591 days	30 Jun '15	02 Oct '17
59	Ontario Heritage Act Clearances	525 days	30 Jun '15	30 Jun '17
60	MNRF Work Permit	595 days	25 May '15	31 Aug '17
61	**RTO Activities**	**1458 days**	**02 Feb '15**	**28 Aug '20**
62	**PJM/FE Activities**	**1453 days**	**09 Feb '15**	**28 Aug '20**
63	**HONI Activities**	**568 days**	**30 Apr '15**	**30 Jun '17**
64	**IESO Activities**	**892 days**	**02 Feb '15**	**29 Jun '18**
65	**Merchant Activities - Secure Adequate Transmission Customers**	**261 days**	**01 Jan '16**	**30 Dec '16**
66	**Prysmian Cable Booking Time**	**361 days**	**01 Jan '17**	**18 May '18**
67	**Prysmian Submarine Cable**	**1662 days**	**25 May '15**	**30 Sep '21**
68	**Canadian Land Disposition - MNRF Land Use Permit/Easement**	**1662 days**	**25 May '15**	**30 Sep '21**

ID	Task Name	Duration	Start	Finish
69	**ITC/B&V Design Review**	**306 days**	**10 Apr '17**	**08 Jun '18**
70	**Submarine Cable Manufacture**	**394 days**	**21 Sep '18**	**24 Mar '20**
71	**Submarine Cable Installation**	**631 days**	**01 May '18**	**26 Sep '20**
72	Construct Infrastructure (HDD, rock trenching)	416 days	01 May '18	30 Nov '19
73	Cable Transport (By Prysmian)	194 days	27 Jun '19	24 Mar '20
74	Mobilize DP Spread	43 days	04 Feb '20	02 Apr '20
75	Route Clearance	11 days	03 Apr '20	18 Apr '20
76	Utility Crossings	44 days	03 Apr '20	03 Jun '20
77	Install Submarine Cables	86 days	20 Apr '20	17 Aug '20
78	Cable Off Load	1 day	18 Aug '20	18 Aug '20
79	Demobilize	27 days	20 Aug '20	26 Sep '20
80	**Prysmian Terrestrial Cable & Accessory Manufacturing**	**174 days**	**19 May '18**	**15 Jan '19**
81	**Prysmian Terrestrial Cable USA**	**1423 days**	**25 May '15**	**31 Oct '20**
82	**Land Acquisition**	**792 days**	**25 May '15**	**01 Jun '18**
83	**Design**	**471 days**	**06 Jun '16**	**24 Mar '18**
84	**Construction**	**642 days**	**19 May '18**	**31 Oct '20**
85	Civil Work Erie	390 days	19 May '18	13 Nov '19
86	Land Cable Installation Erie	218 days	01 Jan '20	31 Oct '20
87	**Prysmian Terrestrial Cable Canada**	**1444 days**	**25 May '15**	**30 Nov '20**
88	**Land Acquisition**	**792 days**	**25 May '15**	**02 Jun '18**
89	**Design**	**471 days**	**06 Jun '16**	**24 Mar '18**
90	**Construction**	**152 days**	**01 May '20**	**30 Nov '20**
91	Civil Work and Land Cable Install Nanticoke	152 days	01 May '20	30 Nov '20
92	**Prysmian Terrestrial Completion**	**91 days**	**04 Jun '20**	**08 Oct '20**
93	**Lake/Land Joint Nanticoke**	**11 days**	**04 Jun '20**	**18 Jun '20**
94	**Lake/Land Joint Erie**	**9 days**	**21 Sep '20**	**01 Oct '20**
95	**Final Test**	**5 days**	**02 Oct '20**	**08 Oct '20**
96	**Interconnection Facilities**	**99 days**	**01 Apr '20**	**16 Aug '20**
97	**US Interconnection Facilities**	**100 days**	**01 Apr '20**	**18 Aug '20**
98	**Canadian Interconnection Facilities**	**100 days**	**01 Apr '20**	**18 Aug '20**
99	**Converter Stations**	**1420 days**	**30 Apr '15**	**02 Oct '20**
100	**Land Acquisition**	**523 days**	**30 Apr '15**	**28 Apr '17**
101	**Design/Engineering**	**408 days**	**03 Jul '18**	**22 Jan '20**
102	**Civil Design/Site Works**	**704 days**	**12 Jul '17**	**19 Mar '20**

ID	Task Name	Duration	Start	Finish
103	Erie Converter Station	704 days	12 Jul '17	19 Mar '20
104	Haldimand Converter Station	704 days	12 Jul '17	19 Mar '20
105	**Equipment Manufacturing and Delivery**	**351 days**	**13 Dec '18**	**16 Apr '20**
106	**Installation**	**202 days**	**26 Dec '19**	**02 Oct '20**
107	**Converter Station Commissioning**	**65 days**	**02 Oct '20**	**31 Dec '20**
108	**EF3-Commissioning**	**61 days**	**02 Oct '20**	**25 Dec '20**
109	**Trial Run Operation**	**5 days**	**25 Dec '20**	**31 Dec '20**
110	**Energization**	**0 days**	**31 Dec '20**	**31 Dec '20**

4.4.1 Schedule

The Project schedule is shown on **Figure 14 in Appendix A**. It is anticipated that NEB approval will be obtained by ~~Q2 2016~~ Q1 2017 and other required pre-construction permits and approvals will be received by ~~the~~ Q2 ~~2017~~ 2018. Construction will be initiated in Q2 ~~2017~~ 2018, with commissioning and commercial operation targeted for Q4 ~~2019~~ 2020. The Project schedule may be adjusted due to market conditions as a result of the competitive solicitation process, formal engineering design, and/or permitting.

The following provides a description of the major phases of the Project development:

- Consultation, Approvals and Permitting:
  - The first phase of the Project was commenced in 2013 by LEPC. Upon acquisition of the Project in June 2014, ITC Lake Erie continued to consult extensively with agencies, Aboriginal groups, and the public and other stakeholders during this period and will continue as appropriate through the NEB review process. Further details about the consultation completed during the preparation of the NEB Application are provided in Section 5.0.

    Details regarding the schedule for other approvals and permits are noted in Section 4.4.2 below.

- Design and Engineering:
  - The second phase will include completion of System/Interaction Studies, primary engineering, control and protection engineering and main component design.
  - The design and engineering phase is currently scheduled from approximately Q3 ~~2017~~ 2018 to Q1 ~~2019~~ 2020.
- Converter Station Installation (Haldimand and Erie Converter Stations):
  - The scheduling of the third phase is dependent on the receipt of the required approvals and permits and the manufacturing of the converter station components.
  - No timing restrictions within the proposed construction period have been identified related to the federal *Species at Risk Act,* S.C. 2002, c.29 (SARA) species and habitat, or for any other factor, as it relates to installation of the Haldimand Converter Station in Ontario.
  - Civil works would be undertaken from ~~Q2 2018~~ Q3 2017 to Q1 ~~2019~~ 2020.
  - The manufacturing of converter station components is scheduled from Q4 ~~2017~~ 2018 to Q2 ~~2019~~ 2020.
  - The installation of converter station equipment is scheduled from Q4 ~~2018~~ 2019 to Q4 ~~2019~~ 2020.
- AC and HVDC Cable Installation:
  - The HVDC cable installation in Lake Erie must be scheduled for the spring or summer when Lake Erie is ice-free and weather conditions are likely to optimal.

- No timing restrictions within this construction window have been identified related to SARA species and habitat, or for any other factor, as it relates to either the installation on-land or in Canadian waters.
- The manufacturing of cables and joints is scheduled from ~~Q2 2017~~ Q3 2018 to ~~Q4 2018~~ Q1 2020.
- Preparatory work (construct infrastructure, route clearances, and crossings) is scheduled from Q2 ~~2017~~ 2018 to ~~Q1 2019~~ Q2 2020.
- The installation of terrestrial (AC and HVDC cables) is scheduled from Q1 2020 to Q4 2020 and submarine HVDC cables is scheduled from Q2 to Q3 ~~2019~~ 2020.

- Commissioning:
  - Currently projected for the Q4 ~~2019~~ 2020.
- Operation and Maintenance:
  - The Project has a minimum 30-year design life. The Project has been designed to require minimal/infrequent maintenance. A maintenance schedule will be developed as part of detailed design.
- Decommissioning, abandonment and site reclamation:
  - The Project's anticipated decommissioning is approximately 30 years or more following commissioning (i.e., ~~2049~~ 2050).
  - The replacement of converter station components would extend the operating life of the Project.