

McCarthy Tétrault LLP  
PO Box 48, Suite 5300  
Toronto-Dominion Bank Tower  
Toronto ON M5K 1E6  
Canada  
Tel: 416-362-1812  
Fax: 416-868-0673

**Gordon M. Nettleton**  
Partner  
Email: gnettleton@mccarthy.ca

**mccarthy  
tétrault**

**December 8, 2016**

**VIA RESS AND COURIER**

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, 27th Floor  
Toronto, Ontario M4P 1E4

Dear Ms. Walli:

**RE: EB-2016-0160 Hydro One Networks Inc. (“Hydro One”) Transmission Rates  
Application – Responses to Undertakings J6.2, J7.1, and J7.4**

Hydro One’s responses to Undertakings J6.2, J7.1, and J7.4 are enclosed.

Yours truly,

**McCarthy Tétrault LLP**

Per:



For: Gordon M. Nettleton

GMN

1 **UNDERTAKING – J6.2**

2  
3 **Undertaking**

4  
5 To explain why in 2015 there was a large increase from 2014 for the multi-circuit  
6 equipment failure contributions to SAIDI and SAIFI.

7  
8 Reference: IR: I-03-021

9  
10 **Response**

11  
12 The increase in SAIDI and SAIFI in 2015 was attributed to interruptions caused by three  
13 types of defective equipment. There were ten interruptions caused by defective surge  
14 arresters, seven interruptions caused by defective busses and fifteen interruptions due to  
15 breaker issues in 2015. There were no outages in 2014 that resulted from either defective  
16 surge arresters or busses, and only four interruptions due to breakers. There were eleven  
17 more interruptions caused by defective breakers in 2015 than in 2014. The twenty-eight  
18 additional interruptions from surge arrestors, busses and breakers accounted for the  
19 increase in equipment failures contribution to both the SAIDI (duration of interruptions)  
20 and SAIFI (frequency of interruptions) in 2015.

1 **UNDERTAKING – J7.1**

2  
3 **Undertaking**

4  
5 To advise the date of the latest asset condition assessment

6  
7 **Response**

8  
9 The last third party asset assessment was performed by Hatch Acres in 2008.

Witness: Chong Kiat Ng

**UNDERTAKING – J7.4**

1

2

3

**Undertaking**

4

5

To advise the percentage and number of momentary interruptions and the number of sustained interruptions, for the period 2011 to 2015; or to indicate that the question has been previously answered

8

9

**Response**

10

11

The table below shows the annual number of momentary and sustained interruptions and total interruption hours for the Hydro One transmission system for the period of 2011 to 2015 inclusive.

12

13

14

15

**2011 to 2015 Annual SAIFI for Hyro One**

<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Number of momentary Interruptions	523	580	618	428	450
Number of sustained Interruptions	530	544	512	538	525
<b>Total interruption hours</b>	<b>1,873</b>	<b>1,064</b>	<b>973</b>	<b>551</b>	<b>658</b>

16