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September 11, 2018

Ms. Kirsten Walli, Board Secretary
Ontario Energy Board
2300 Yonge Street
P.O. Box 2319
Suite 2701
Toronto, ON M4P 1E4

**Re: Thunder Bay Hydro Electricity Distribution Inc. (Thunder Bay Hydro) and
Kenora Hydro Electric Corporation Ltd. (Kenora Hydro)
Corporation application under section 18, 60, 77(5) and 86 (1) of the *Ontario Energy
Board Act, 1998* and application for other related relief (EB-2018-0124)**

Dear Ms. Walli,

The following has been submitted as additional evidence and support to IR responses #6, and #11 of the previously filed IR responses in MAAD Application (EB-2018-0124).

Should the Board have any further questions, please do not hesitate to contact the undersigned at (807)-343-1054 or via email at bashby@tbhydro.on.ca.

Sincerely,

Signed in the original

Brittany J. Ashby

Supervisor, Business & Regulatory Affairs
Thunder Bay Hydro Electricity Distribution Inc.
34 Cumberland Street North
Thunder
Bay, Ontario
P7A 4L4

Phone: (807) 343-1054
Fax: (807) 343-1009
Email: bashby@tbhydro.on.ca

Cc: Ron Clark, Aird & Berlis LLP counsel to Thunder Bay Hydro
Cc: Dan Gormley, Goodmans LLP counsel to Kenora Hydro

1 **Staff IR #6**

2 **LDC MERGECO RESPONSE:**

3 LDC Mergeco inadvertently referenced the incorrect formula cells when summarizing the Net
 4 Metering Threshold tables. Please see table below revised for 2017 System Peak figures,
 5 and the 4 year average summary. It can be noted that all of the peaks below are winter peaks
 6 without generation.

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Thunder Bay Hydro				
1	Distributor	System Peak (kW)	1% Rule (kW)	Net Metering Threshold (kW)
2	2014	182,512	1,825	2,422
3	2015	180,037	1,800	1,520
4	2016	170,122	1,701	1,766
5	2017	161,103	1,611	1,704
6	4 - Year Average	173,444	1,734	1,853
Kenora Hydro				
1	Distributor	System Peak (kW)	1% Rule (kW)	Net Metering Threshold (kW)
2	2014	21,756	218	12
3	2015	20,693	207	112
4	2016	19,063	191	143
5	2017	18,576	186	194
6	4 - Year Average	20,022	200	115
LDC Merge Co				
1	Distributor	System Peak (kW)	1% Rule (kW)	Net Metering Threshold (kW)
2	2014	204,268	2,043	2,434
3	2015	200,730	2,007	1,632
4	2016	189,185	1,892	1,909
5	2017	179,679	1,797	1,899
6	4 - Year Average	193,466	1,935	1,968

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1 System Peaks have been observed to be declining over the years for a combination of
2 reasons as follows:

- 3 • System Peak reduction factors at both utilities include; CDM impact, customer usages
4 habits, and economic shifts in the businesses/industry in the service territories (loss of
5 larger industry);
- 6 • The Conservation and Demand Management programs at the utilities have
7 encouraged customers in the territory to use more energy efficient technologies in their
8 daily operations; and
- 9 • Thunder Bay Hydro has signed two co-generation/combined heat and power (CHP)
10 contracts within its service territory, one as of December 17 2015, and another as of
11 April 21 2016.

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1 **Staff IR #11**

2 **LDC MERGECO RESPONSE:**

3 LDC Mergeco would like to provide additional explanation to the 2017 SAIDI and SAIFI data
4 collected as it relates to Kenora Hydro’s reliability statistics increase. Please see the table
5 below for the updated 2017 SAIDI SAIFI statistics, with an updated 6 year average.

	Description	2012	2013	2014	2015	2016	2017	Average
1	SAIDI							
2	Thunder Bay Hydro	1.28	1.03	1.92	2.02	1.69	1.63	1.60
3	Kenora Hydro	0.43	0.36	0.53	0.61	0.59	3.84	1.06
4	SAIFI							
5	Thunder Bay Hydro	3.12	2.02	2.69	2.39	2.7	3.05	2.66
6	Kenora Hydro	0.46	0.11	0.29	0.35	0.43	1.88	0.59

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8 When reviewing the reported reliability data above it can be noted that Kenora Hydro has
9 experienced an increase in both 2017 SAIDI and SAIFI statistics. It is important to note that
10 the table above excludes cause code 2 (loss of supply), and cause code 10 (major outages)
11 statistics. Although Kenora Hydro experiences similar environmental and weather patterns as
12 Thunder Bay Hydro, Kenora Hydro did not experience any outage events which qualified as a
13 *Major Outage* whereas Thunder Bay Hydro did. Therefore Kenora Hydro did not meet the
14 requirements of having any unforeseeable, unpredictable, unpreventable, or unavoidable
15 statistics removed from their reliability set of data.

16
17 Please see the tables below for Kenora Hydro’s contribution reliability metrics in tabular format
18 for the years 2014 – 2017. It can be observed by reviewing the tabular SAIDI and SAIFI
19 statistics in the tables below that Scheduled Outage (Code 1) and Adverse Environment
20 (Code 7) have peaked in Kenora Hydro’s reliability contribution during the 2017 year. The two
21 events which contributed highly to these statistics are further described below.

SAIDI						
	Description	2014	2015	2016	2017	Average
Cause Code	Kenora Hydro	0.53	0.61	0.59	3.84	1.39
1	Scheduled Outage	0.11	0.05	0.07	0.78	0.25
3	Tree Contacts	0.03	0.17	0.19	0.46	0.21
5	Defective Equipment	0.04	0.10	0.06	0.10	0.08
6	Adverse Weather	0.00	0.00	0.00	0.00	0.00
7	Adverse Environment	0.00	0.00	0.00	2.48	0.62
	Total	0.18	0.32	0.32	3.82	1.16
	Percentage Contribution	34.0%	52.5%	54.2%	99.5%	109.4%
SAIFI						
	Description	2014	2015	2016	2017	Average
	Kenora Hydro	0.29	0.35	0.43	1.88	0.74
1	Scheduled Outage	0.07	0.02	0.05	1.06	0.30
3	Tree Contacts	0.02	0.02	0.07	0.28	0.10
5	Defective Equipment	0.07	0.04	0.05	0.07	0.06
6	Adverse Weather	0.00	0.00	0.00	0.00	0.00
7	Adverse Environment	0.00	0.00	0.00	0.45	0.11
	Total	0.16	0.08	0.17	1.86	0.57
	Percentage Contribution	55.2%	22.9%	39.5%	98.9%	96.7%

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Outage Event #1: In 2017 Kenora Hydro experienced a larger than average Scheduled Outage (**Code 1**) to its substation. Through regular patrols Kenora Hydro discovered there was a cracked insulator on the 115 kV side of the substation. Unfortunately due to safety concern Hydro One could not isolate the particular feed to allow quick repair without customer interruption, as a result Kenora Hydro determined that it was necessary to repair and scheduled a city-wide outage. In this particular instance Kenora Hydro hired a company out of Thunder Bay to remove the cracked insulator from service. The full city outage lasted approximately 45 minutes and contributed to SAIDI by approximately 0.7 and SAIFI by approximately 1.0.

Outage Event #2: The second event contributing to the 2017 increase in Kenora Hydro’s reliability statistics occurred in April as a result of very wet weather and a tracking cutout,

1 Kenora Hydro experienced a pole fire. The location was in an isolated area in the bush and
2 the outage occurred very late at night categorizing this particular outage as Adverse
3 Environment (**Code 7**). Due to the challenges Kenora Hydro employees took longer than
4 regularly required to discover the location and problem of the outage. This outage was a
5 complicated double circuit structure that was very badly damaged and required a large
6 amount of reconstruction. This outage occurrence contributed approximately 2.48 to SAIDI
7 and SAIFI by approximately 0.45.