

1 Q. Please provide annual deliverability point reliability measures, such as CAIDI and SAIFI, at
2 the district or zone level, for the most recent five years.

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5 A. T-SAIFI,^{1,2} T-SAIDI,^{3,4} and T-SARI^{5,6} are the equivalent measures used for delivery points on
6 the transmission system. Table 1 lists the transmission performance for T-SAIFI, Table 2 lists
7 T-SAIDI, and Table 3 lists T-SARI, all for the years 2014 to 2018. All data presented includes
8 planned and unplanned outages with significant events⁷ removed.

Table 1: T-SAIFI Transmission Performance without Significant Events

Year	Hydro ⁸	TRO ⁹	TRO	Labrador	Labrador	TRO	Central	Industrial	NP	CEA
		Northern	Labrador ¹⁰	East	West	Central ¹¹	(rural)			
2014	3.10 ¹²	10.33 ¹³	7.50	-	-	0.93 ¹⁴	2.18 ¹⁵	0.43 ¹⁶	0.54 ¹⁷	0.89
2015	3.10	7.83	6.00	9.00	3.00	1.54	3.18	0.86	1.04	0.86
2016	2.86	9.00	2.25	4.00	0.50	1.25	3.09	0.28	0.73	0.81
2017	2.13 ¹⁸	5.42	4.25	5.50	3.00	1.05 ¹⁹	2.91	0.43 ²⁰	0.42 ²¹	0.84
2018	3.88 ²²	12.50 ²³	7.00	4.50	9.50	1.25	2.55	0.14	1.00	N/A

¹ System Average Interruption Frequency Index ("SAIFI").

² T-SAIFI is a measure of sustained interruptions ("int") per delivery point ("dp").

³ System Average Interruption Duration Index ("SAIDI").

⁴ T-SAIDI is a measure of total duration (minutes) per dp.

⁵ System Average Restoration Index ("SARI").

⁶ T-SARI is a measure of the average duration of a dp interruption representing the average restoration time for each dp interruption during a given period—usually a year. This is the transmission equivalent to Customer Average Interruption Duration Index, which is a measure of distribution reliability.

⁷ The Canadian Electricity Association ("CEA") defines significant events as "events that exceed reasonable design and/or operational limits of the electrical power system." Examples of significant events include hurricanes, ice storms, and loss of supply, such as the generation shortages that occurred on the Island Interconnected System in January 2013 and January 2014.

⁸ Newfoundland and Labrador Hydro ("Hydro").

⁹ Transmission and Rural Operations ("TRO").

¹⁰ TRO Labrador in 2014 is the equivalent of Labrador East and Labrador West, breakout reporting started in 2015.

¹¹ TRO Central is the equivalent total of Central (rural), Industrial, and Newfoundland Power.

¹² Does not include 0.68 int/dp due the January 2014 winter storm.

¹³ Does not include 0.42 int/dp due the January 2014 winter storm.

¹⁴ Does not include 0.77 int/dp due the January 2014 winter storm.

¹⁵ Does not include 1.01 int/dp due the January 2014 winter storm.

¹⁶ Does not include 0.57 int/dp due the January 2014 winter storm.

¹⁷ Does not include 0.73 int/dp due the January 2014 winter storm.

¹⁸ Does not include 0.12 int/dp due the March 2017 winter storm.

¹⁹ Does not include 0.15 int/dp due the March 2017 winter storm.

²⁰ Does not include 0.28 int/dp due the March 2017 winter storm.

²¹ Does not include 0.19 int/dp due the March 2017 winter storm.

²² Does not include 0.02 int/dp due the January 2018 landslide and February 2018 wind event.

²³ Does not include 0.09 int/dp due the January 2018 landslide.

Table 2: T-SAIDI Transmission Performance without Significant Events

Year	Hydro	TRO Northern	TRO Labrador	Labrador East	Labrador West	TRO Central	Central (rural)	Industrial	NP	CEA
2014	337.21 ²⁴	807.00 ²⁵	324.00	-	-	209.68 ²⁶	683.36 ²⁷	46.71 ²⁸	53.52 ²⁹	86.07
2015	476.63	842.08	1187.75	1034.50	1341.00	312.32	787.64	218.00	136.62	94.12
2016	324.73	582.92	337.25	446.50	228.00	253.18	798.82	3.71	89.50	98.22
2017	398.33 ³⁰	520.42	1372.00	1943.00	801.00	257.43 ³¹	877.73	2.43 ³²	63.65 ³³	97.90
2018	488.65 ³⁴	1340.00 ³⁵	1105.25	537.50	1673.00	200.41 ³⁶	497.55	0.57	128.50 ³⁷	N/A

Table 3: T-SARI Transmission Performance without Significant Events

Year	Hydro	TRO Northern	TRO Labrador	Labrador East	Labrador West	TRO Central	Central (rural)	Industrial	NP	CEA
2014	108.78	78.12	43.20	-	-	225.46	313.47	108.63	99.10	96.80
2015	153.75	107.55	197.96	114.94	447.00	202.81	247.69	253.49	131.37	109.56
2016	113.54	64.77	149.89	111.63	456.00	202.54	258.52	13.25	122.60	120.99
2017	187.01	96.02	322.82	353.27	267.00	245.17	301.63	5.65	151.55	116.20
2018	125.94	107.20	157.89	119.44	176.11	160.33	195.12	4.07	128.50	N/A

²⁴ Does not include 120.50 mins/dp due the January 2014 winter storm.

²⁵ Does not include 8.97 mins/dp due the January 2014 winter storm.

²⁶ Does not include 156.25 mins/dp due the January 2014 winter storm.

²⁷ Does not include 40.82 mins/dp due the January 2014 winter storm.

²⁸ Does not include 79.72 mins/dp due the January 2014 winter storm.

²⁹ Does not include 225.34 mins/dp due the January 2014 winter storm.

³⁰ Does not include 114.57 mins/dp due the March 2017 winter storm.

³¹ Does not include 156.23 mins/dp due the March 2017 winter storm.

³² Does not include 14.28 mins/dp due the March 2017 winter storm.

³³ Does not include 260.54 mins/dp due the March 2017 winter storm.

³⁴ Does not include 37.39 mins/dp due the January 2018 landslide and February 2018 wind event.

³⁵ Does not include 127.50 mins/dp due the January 2018 landslide and February 2018 wind event.

³⁶ Does not include 16.20 mins/dp due the January 2018 landslide and February 2018 wind event.

³⁷ Does not include 27.42 mins/dp due the January 2018 landslide and February 2018 wind event.