

1 Q. Please provide tables that indicate SAIFI, CAIDI, and SAIDI for 2016, 2017, and 2018
2 for (1) transmission system, (2) the interconnected distribution system, by TRO
3 Region, and (3) each of the isolated diesel plant systems for Newfoundland Hydro
4 (planned outage caused only).

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7 A. The following tables outline SAIFI, CAIDI and SAIDI for the years 2016, 2017 and
8 2018 with Planned Outages Only.

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10 Note:

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- 12 • 2016-2018 planned transmission reliability statistics were significantly impacted
13 by outages associated with the the construction of TL267.
 - 14 • In Q3 2018, Hydro started the practice of using Live Line work when possible. In
15 Q3 alone, this practice contributed to an improvement in SAIDI of 3.63
16 hours/customer. Hydro plans to continue and expand this practise in 2019 and
17 beyond.
 - 18 • William's Harbour was resettled in 2017 and diesel generating plant was
removed.

1 1. Please note that T-SAIFI, T-SARI¹, and T-SAIDI and are the equivalent measures
 2 used for the transmission system. Table 1.1 lists the Transmission Performance
 3 for T-SAIFI, T-SARI², and T-SAIDI for the years 2016, 2017 and 2018 with Planned
 4 Outages Only.

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 6 Definitions:

7 T-SAIFI = Sustained Interruptions /Delivery Point

8 T-SAIDI = Total Duration (minutes)/Delivery Point

9 T-SARI = Total Duration (minutes)/Sustained Interruption

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11 SAIFI = Total Sustained Interruptions/Customer

12 SAIDI = Total Sustained Interruption Duration (Hours)/Customer

13 CAIDI= Total Sustained Interruption Duration (Hours)/ Average Sustained
 14 Interruption

Table 1.1 - Transmission Performance

	2016	2017	2018
T-SAIFI	0.98	1.02	1.42
T-SAIDI	198.28	259.35	292.17
T-SARI	202.33	254.26	205.75

¹ **System Average Restoration Index – (T-SARI)**. A measure of the average duration of a delivery point interruption, representing the average restoration time for each delivery point Interruption during a given period, usually a year.

- 1 2. Tables 2.1, 2.2 and 2.3 list the Interconnected Distribution system for SAIFI,
2 CAIDI and SAIDI for the years 2016, 2017 and 2018 respectively with Planned
3 Outages Only by TRO Region.

Table 2.1 - TRO Central Interconnected

	2016	2017	2018
SAIFI	0.33	1.11	1.44
SAIDI	0.50	3.53	3.93
CAIDI	1.52	3.18	2.73

Table 2.2 - TRO Labrador Interconnected

	2016	2017	2018
SAIFI	0.79	1.16	0.55
SAIDI	1.23	1.35	1.14
CAIDI	1.56	1.16	2.07

Table 2.3 - TRO Northern Interconnected

	2016	2017	2018
SAIFI	0.43	0.16	0.05
SAIDI	0.58	0.59	0.15
CAIDI	1.35	3.69	3.00

- 4 3. Tables 3.1, 3.2, and 3.3 list each diesel plant for SAIFI, CAIDI and SAIDI for the
5 years 2016, 2017 and 2018 respectively with Planned Outages Only.

Table 3.1 – SAIFI – Isolated Diesel Systems

REGION	SYSTEM	2016	2017	2018
Central Isolated		0.17	0.00	0.82
	Francois	0.00	0.00	0.00
	Gray River	0.00	0.00	0.00
	Little Bay Islands	1.07	0.00	0.00
	McCallum	0.00	0.00	0.00
	Ramea	0.00	0.00	2.00
	St. Brendan's	0.00	0.00	0.00
Labrador Isolated		1.17	1.07	0.22
	Black Tickle	0.00	0.00	0.00
	Cartwright	3.00	1.23	0.00
	Hopedale	0.00	0.99	0.00
	Makkovik	0.00	1.04	1.00
	Nain	0.99	0.50	0.00
	Paradise River	4.00	1.00	0.00
	Postville	2.00	5.00	0.00
Rigolet	1.00	0.00	0.99	
Northern Isolated		0.73	1.09	0.84
	Charlottetown	1.00	0.53	0.20
	L'Anse-Au-Loup	0.44	1.66	0.47
	Mary's Harbour	1.00	1.04	2.21
	Port Hope Simpson	2.00	0.00	2.09
	St. Lewis	0.01	0.01	0.00
	William's Harbour	0.00	0.00	N/A

Table 3.2 – SAIDI – Isolated Diesel Systems

REGION	SYSTEM	2016	2017	2018
Central Isolated		0.21	0.00	5.09
	Francois	0.00	0.00	0.00
	Gray River	0.00	0.00	0.00
	Little Bay Islands	1.37	0.00	0.00
	McCallum	0.00	0.00	0.00
	Ramea	0.00	0.00	12.42
	St. Brendan's	0.00	0.00	0.00
Labrador Isolated		2.80	3.51	1.19
	Black Tickle	0.00	0.00	0.00
	Cartwright	10.53	7.63	0.00
	Hopedale	0.00	0.69	0.00
	Makkovik	0.00	5.97	5.75
	Nain	0.25	0.72	0.00
	Paradise River	9.08	3.00	0.00
	Postville	7.00	12.12	0.00
	Rigolet	0.25	0.00	4.69
Northern Isolated		1.45	5.36	3.08
	Charlottetown	7.05	1.23	0.52
	L'Anse-Au-Loup	0.64	7.70	1.61
	Mary's Harbour	1.50	8.16	8.82
	Port Hope Simpson	0.58	0.00	7.66
	St. Lewis	0.04	0.01	0.00
	William's Harbour	0.00	0.00	N/A

Table 3.3 – CAIDI – Isolated Diesel Systems

REGION	SYSTEM	2016	2017	2018
Central Isolated		1.29	0.00	6.20
	Francois	0.00	0.00	0.00
	Gray River	0.00	0.00	0.00
	Little Bay Islands	1.29	0.00	0.00
	McCallum	0.00	0.00	0.00
	Ramea	1.25	0.00	6.20
	St. Brendan's	0.00	0.00	0.00
Labrador Isolated		2.39	3.28	5.31
	Black Tickle	0.00	0.00	0.00
	Cartwright	3.51	6.19	0.00
	Hopedale	0.00	0.70	0.00
	Makkovik	0.00	5.75	5.75
	Nain	0.25	1.43	0.00
	Paradise River	2.27	3.00	0.00
	Postville	3.50	2.42	0.00
Rigolet	0.25	0.00	4.72	
Northern Isolated		2.00	4.92	3.69
	Charlottetown	7.05	2.33	2.66
	L'Anse-Au-Loup	1.45	4.64	3.43
	Mary's Harbour	1.50	7.83	3.99
	Port Hope Simpson	0.29	0.00	3.67
	St. Lewis	5.20	1.17	0.00
	William's Harbour	0.00	0.00	N/A