

1 Q. **NLH Evidence, Section 3.4, page 3.10**

2 Preamble:

3 Table 3-3 provides SAIFI and SAIDI for all regions combined. The figures for SAIDI  
4 are extremely high.

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6 Please provide SAIFI and SAIDI figures for each year from 2012 through 2016 for  
7 each cost of service area (Island Interconnected System, Labrador Interconnected  
8 System, Anse au Loup, and the Island Isolated System and Labrador Isolated  
9 System).

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12 A. The data in Table 3-3 provides the Transmission T-SAIFI and T-SAIDI<sup>1</sup> performance,  
13 which is a measure of the Bulk Electric System Performance. SAIFI and SAIDI<sup>2</sup>  
14 measure distribution performance, and are not comparable to T-SAIFI and T-SAIDI.  
15 SAIFI and SAIDI for all regions combined from 2012 to 2016 are provided in Table 3-  
16 4. Please note that T-SAIFI and T-SAIDI does not necessarily indicate customer  
17 impact. The actual impact on customer is presented in Table 3-4.

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19 The calculation for T-SAIDI is as follows:

$$\text{T- SAIDI} = \frac{\text{Total Duration of all Interruption (in minutes)}}{\text{Total Number of delivery points}^3 \text{ monitored}}$$

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<sup>1</sup> Transmission System Average Interruption Duration Index (T-SAIDI) – a reliability KPI for bulk transmission assets which measures the average duration of outages in minutes per delivery point.

<sup>2</sup> System Average Interruption Duration Index (SAIDI) - a reliability KPI for distribution service that measures service continuity in terms of the average cumulative duration of outages per customer served during the year, measured in hours.

<sup>3</sup> Delivery point is the point of supply where the energy from the Bulk Electric System is transferred to its customers, for either distribution systems or for customers directly connected to the transmission system.

1 The calculation for SAIDI is as follows:

$$\text{SAIDI} = \frac{\text{Total Customer-Hours of Interruptions}}{\text{Total Customers Served}}$$

2 L'Anse au Loup and the Island Isolated and Labrador Isolated Systems are not part  
 3 of the Bulk Electric System (Transmission) System. Therefore, T-SAIFI and T-SAIDI  
 4 data does not exist for these systems. Table 3-3(i) and 3-(ii) provide the T-SAIFI and  
 5 T-SAIFI for the Island and Labrador Interconnected Systems and Distribution SAIFI  
 6 and SAIDI data for all areas. The Labrador Isolated System referenced in the tables  
 7 refers to all isolated systems in Labrador.

**Table 3-3(i) Transmission Performance (Planned and Forced Outages)  
Island Interconnected System**

	2012	2013	2014	2015	2016
T-SAIFI	1.76	3.30	3.64	2.89	2.91
T-SAIDI	173.57	438.04	462.48	425.84	323.84

**Table 3-3(ii) Transmission Performance (Planned and Forced Outages)  
Labrador Interconnected System**

	2012	2013	2014	2015	2016
T-SAIFI	5.00	7.50	10.50	6.00	2.25
T-SAIDI	95.50	1320.00	466.50	1187.75	337.25

**Table 3-4(i) Distribution Performance (Planned and Forced Outages)  
Island Interconnected System**

	2012	2013	2014	2015	2016
SAIFI	3.24	4.31	4.51	4.96	7.31
SAIDI	7.58	16.77	14.92	13.17	19.43

**Table 3-4(ii) Distribution Performance (Planned and Forced Outages)  
Labrador Interconnected System**

	2012	2013	2014	2015	2016
SAIFI	5.44	8.74	9.76	10.48	5.06
SAIDI	9.28	28.56	26.48	28.81	10.62

**Table 3-4(iii) Distribution Performance (Planned and Forced Outages)  
L'Anse au Loup System**

	2012	2013	2014	2015	2016
SAIFI	6.36	4.05	18.79	11.42	7.60
SAIDI	8.54	5.40	22.21	8.60	4.54

**Table 3-4(iv) Distribution Performance (Planned and Forced Outages)  
Island Isolated System**

	2012	2013	2014	2015	2016
SAIFI	2.69	2.85	3.63	2.34	2.35
SAIDI	4.93	2.55	4.56	0.60	4.97

**Table 3-4(v) Distribution Performance (Planned and Forced Outages)  
Labrador Isolated System (All Labrador)**

	2012	2013	2014	2015	2016
SAIFI	9.10	6.82	12.37	9.91	7.83
SAIDI	14.48	7.16	17.46	22.60	10.29