

1 **Q.** (page 1-4, lines 1 to 3) It is stated “*The average duration of customer outages has*
2 *been ½ the Canadian average over the last 10 years. The average frequency of*
3 *customer outages has been consistent with the Canadian average.*”
4

5 (a) What are NP’s targets for SAIDI and SAIFI?
6

7 (b) Is it appropriate that NP provide service with SAIDI and SAIFI levels at the
8 Canadian average given the harsh weather conditions experienced throughout
9 Newfoundland Power’s service territory” (page 1-7, line 10)
10

11 (c) Have customers indicated that they want reliability at levels ½ the CEA average
12 in the case of SAIDI and comparable to the Canadian average in the case of
13 SAIFI?
14

15 (d) Does NP have an estimate of what it has cost customers to have reliability
16 consistent with the Canadian average relative to, for example, having reliability
17 as levels that are 20% above (worse than) the Canadian average?
18

19 (e) How much would customers save if NP allowed reliability to deteriorate to levels
20 about 20% above (worse than) the Canadian average?
21

22 A. (a) Newfoundland Power establishes reliability targets on an annual basis to ensure
23 service quality. For 2018, the Company’s target for SAIDI is 2.27 and the
24 Company’s target for SAIFI is 1.86.
25

26 (b) **A. General**
27

28 Yes, it is appropriate for Newfoundland Power to provide reliable service to
29 customers that is equal to or better than the Canadian average.
30

31 Section 3(b)(iii) of the *Electrical Power Control Act, 1994* requires Newfoundland
32 Power to manage its operations in a manner that would result in power being
33 delivered to consumers in the province at the lowest possible cost consistent with
34 *reliable* service.
35

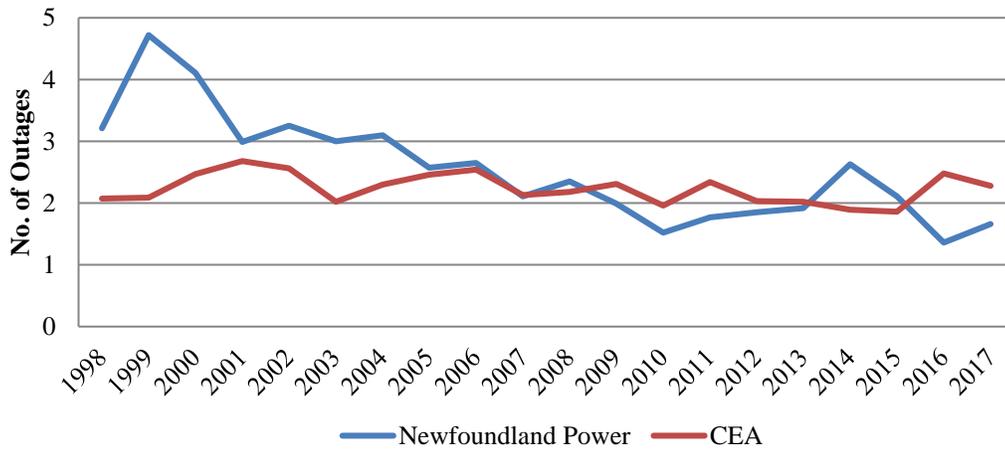
36 In Newfoundland Power’s view, assessing the Company’s reliability performance to
37 be equal to, or better than, the Canadian average is a reasonable indicator of service
38 quality and is consistent with provincial legislation.¹

¹ Section 4 of the *Electrical Power Control Act, 1994* requires the Board, in carrying out its duties, to apply tests that are consistent with generally accepted sound public utility practice. From time to time, this includes comparing Newfoundland Power’s practices and performance to other utilities.

B. Newfoundland Power’s Reliability Performance

Figure 1 shows Newfoundland Power’s SAIFI under normal operating conditions in comparison to the Canadian average for the period 1998 to 2017.²

**Figure 1: SAIFI
Newfoundland Power vs. Canadian Average
Normal Operating Conditions
(1998 to 2017)**

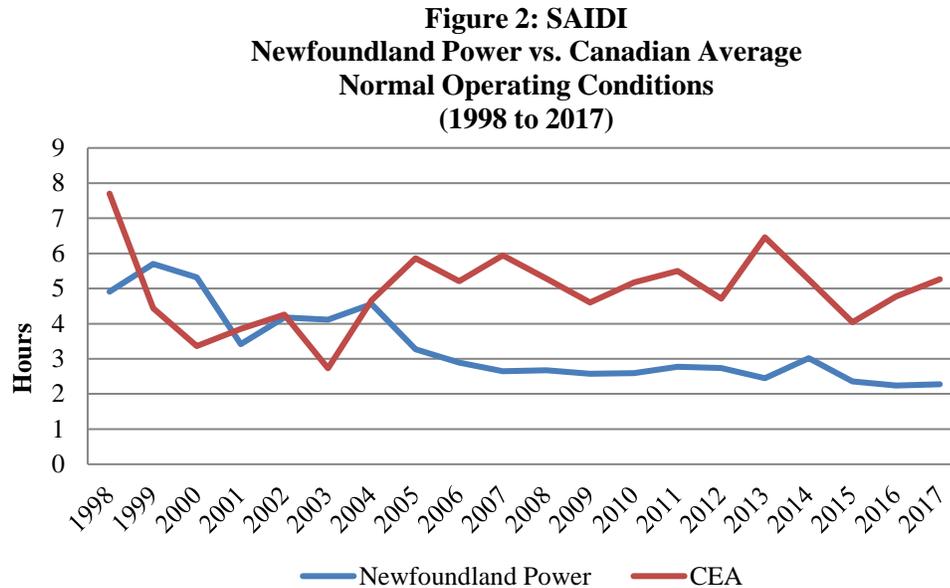


Over the 10-year period from 1998 to 2007, Newfoundland Power’s customers experienced an average of 3.2 outages per year, while the Canadian average was 2.3 outages per year. By comparison, over the most recent 10-year period, Newfoundland Power’s customers have experienced 41% fewer outages than in the previous decade. The number of customer outages is now broadly consistent with the Canadian average.³

² Reference to the Canadian average refers to Region 2 utilities that are members of the CEA. Region 2 utilities include Canadian utilities that serve a mix of urban and rural markets. These are ATCO Electric, BC Hydro, FortisAlberta, FortisBC, Hydro One, Hydro Quebec, Manitoba Hydro, Maritime Electric, NB Power, Newfoundland and Labrador Hydro, Newfoundland Power, Newmarket-Tay Power Distribution, Nova Scotia Power, Northwest Territories Power Corporation, Sask Power, Veridian Connections, Waterloo North Hydro, Yukon Electrical Co. and Yukon Energy.

³ Newfoundland Power’s customers experienced an average of 1.9 outages per year from 2008 to 2017 $((3.2 - 1.9) / 3.2 = 0.41, \text{ or } 41\%)$. The Canadian average over this period was 2.1 outages per year.

1 Figure 2 shows Newfoundland Power’s SAIDI under normal operating conditions in
2 comparison to the Canadian average for the period 1998 to 2017.



3
4
5 Figure 2 shows that, over the last 20 years, the average duration of outages
6 experienced by Newfoundland Power’s customers has decreased by over 1/3,⁴ while
7 the Canadian average has actually *increased*.⁵ Over the most recent period,
8 Newfoundland Power’s customers experienced an average of 2.2 to 3 hours of outage
9 per year. The Canadian average has ranged as high as 6.5 hours over this period.

10
11 Newfoundland Power’s SAIDI is also consistent with the Canadian average when
12 significant events are included. For more information, see PUB-NP-001.

13
14 **C. Balancing Reliability and Cost Management⁶**

15
16 Reliability performance is principally a reflection of the general condition of an
17 electrical system. Newfoundland Power completes targeted capital investments to
18 maintain the reliability of its electrical system. National standards require that the
19 Company’s electrical system assets be constructed and maintained to the highest
20 levels in the country, reflecting the harsh weather conditions experienced throughout
21 Newfoundland Power’s service territory. These standards, as well as formal

⁴ From 1998 to 2007, Newfoundland Power’s customers experienced an average of 4.1 hours of outage per year. From 2008 to 2017, the Company’s customers experienced an average of 2.6 hours of outage per year ((4.1 – 2.6) / 4.1 = 0.37, or 37%).

⁵ From 1998 to 2007, the CEA average was 4.8 hours of outage per year. From 2008 to 2017, the CEA average was 5.1 hours of outage per year.

⁶ More information on how Newfoundland Power balances reliability and cost management is provided in response to Request for Information PUB-NP-019.

1 inspection and maintenance guidelines that follow industry best practices, contribute
2 to the reliability performance shown in Figures 1 and 2.⁷
3

4 The reliability improvements shown in Figures 1 and 2 have been achieved while also
5 improving Newfoundland Power's overall operating efficiency. For example, on an
6 inflation-adjusted basis, the Company has achieved a 23% reduction in gross
7 operating costs per customer over the last 20 years. This cost reduction indicates
8 Newfoundland Power has reasonably balanced system reliability and cost
9 management. For more information on cost management at Newfoundland Power,
10 see response to Request for Information PUB-NP-003.
11

12 **D. Assessing Newfoundland Power's Performance** 13

14 Following #darkNL, when a supply shortage from Newfoundland and Labrador
15 Hydro caused widespread customer outages, the Board appointed The Liberty
16 Consulting Group ("Liberty") to undertake a detailed review of reliability on the
17 Island Interconnected System. Newfoundland Power's operations were thoroughly
18 assessed as part of this review.
19

20 In its report to the Board addressing Newfoundland Power, Liberty noted:
21

22 *"Newfoundland Power's reliability has improved significantly since 1999*
23 *and has recently remained stable overall. Its transmission and distribution*
24 *systems operate effectively in ensuring adequate service reliability. Effective*
25 *maintenance and capital programs, that appropriately recognize the age of*
26 *its assets, have contributed materially to improved reliability."*⁸
27

28 In the Company's view, the stable level of reliability performance maintained over
29 the last decade continues to be reasonable.
30

- 31 (c) Newfoundland Power has not surveyed customers to ascertain their expectations with
32 respect to the Company's performance relative to its peers. However, Newfoundland
33 Power routinely issues customer satisfaction surveys. In 2017, customers indicated
34 they were, on average, 87% satisfied with the Company's service delivery.
35
- 36 (d) Demonstrating sound cost management requires controlling costs without reducing
37 the level of service experienced by customers. Newfoundland Power exercises sound
38 engineering judgment and completes economic analyses to identify opportunities to
39 *improve* the reliability experienced by customers on a least-cost basis. The Company
40 has not estimated the costs to *reduce* the level of reliability customers' experience.
41
- 42 (e) See response (d) above.

⁷ See response to Request for Information CA-NP-022 for more information on Newfoundland Power's construction and maintenance practices.

⁸ The Liberty Consulting Group, *Report on Island Interconnected System to Interconnection with Muskrat Falls Addressing Newfoundland Power*, page ES-2.