

Q. (Reference Report 1.1 Distribution Reliability Initiative)

- a) Please provide references and/or support for the statement that "*The monitoring of reliability metrics and the targeting of capital expenditures on the worst performing feeders is considered good utility practice and is increasingly required by regulatory bodies.*" (page 1)
- b) Does the outage management system track customer complaints about reliability? If not, what means, if any, does NP have to track customer complaints related to reliability?
- c) It is stated (page 4) "*The feeder is predominately within the boundary of the Terra Nova National Park and currently serves approximately 1,560 customers.*" What special arrangements is NP undertaking to preserve the environment within the park?
- d) What percentage of NP's feeders are worse than the company average in at least 3 of the 4 reliability metrics shown in Table 1?
- e) What work has NP done with respect to environmental assessment and permitting requirements that might be expected from Parks Canada, Parks NL, the Department of Transportation and Infrastructure, or other governing body?
- f) Page 8 indicates that there are 180 customers along and downstream of the 12 kilometre section of the feeder. Please provide a profile of these customers. How many are year-round versus seasonal, and residential versus general service and cabins or other? Are all of these customers located in Charlottetown?
- g) Page 8 indicates that there are 1100 customers along and downstream of the 5 kilometre sector of the feeder. Please provide a profile of these customers. How many are year-round versus seasonal, and residential versus general service and cabins or other?
- h) Would changes in reliability in either one of the two sections have any effect on reliability for customers along or downstream from the other section?

- A.**
- a) Newfoundland Power drew on several references in determining that the monitoring of reliability metrics and the targeting of capital expenditures on the worst performing feeders is considered good utility practice and increasingly required by regulatory bodies.

In its *Report on Island Interconnected System to Interconnection with Muskrat Falls Addressing Newfoundland Power Inc.*, the Liberty Consulting Group viewed the gap between Newfoundland Power's worst performing feeders and corporate average reliability as "*substantial enough to warrant the common utility practice of a targeted funding program to address that 10 to 15 percent of feeders exhibiting worst SAIDI and SAIFI performance during the previous year.*"¹ This statement indicates that the Liberty Consulting Group considered the monitoring

¹ See the Liberty consulting group *Report on Island Interconnected System to Interconnection with Muskrat Falls Addressing Newfoundland Power Inc.*, page 23.

1 of reliability indices and targeted investment on statistically determined worst
2 performing feeders as common utility practice.

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4 Electricity Canada's *Worst Performing Feeder Report 2023* provides the results of
5 a survey of 21 Canadian member utilities. The survey found that all 21 utilities
6 monitored their worst performing feeders, with SAIDI/SAIFI being the most
7 popular methodology, utilized by 14 utilities. The report also details regulatory
8 efforts to improve worst performing feeders in Canada and abroad. For example,
9 Texas requires utilities to provide investment plans to address reliability
10 underperformance. The Alberta Utilities Commission requires utilities to describe
11 corrective actions taken for the 3% of circuits with the highest SAIDI values.²

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13 Further to the above references, the report *State of Distribution Reliability*
14 *Regulation in the United States* prepared by Davies Consulting for the Edison
15 Electric Institute describes worst performing feeders as a common reliability
16 standard for which regulator interest was growing in 2005. In addition, the report
17 *Grid Reliability: Focus on 'Worst-Performing Feeders'* prepared by S&C Electric
18 Company identifies that more regulatory attention is being given to worst
19 performing feeders and worst performing feeders are increasingly integrated into
20 performance-based regulation schemes.

21
22 Finally, the Board's Provisional Guideline requires the utility to provide information
23 and report on reliability metrics and worst performing feeders. The Board also
24 states, "*Where there are proposed capital expenditures related to one of these*
25 *feeders, the information should address the particular issues.*"³

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27 b) No, Newfoundland Power's Outage Management System ("OMS") does not track
28 customer complaints about reliability. The OMS is an automated system tracking
29 the location, duration, frequency, and cause of customer outage events.

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31 Newfoundland Power does not discretely track data specific to customer
32 complaints about reliability. Newfoundland Power gauges overall customer
33 satisfaction with its service delivery by way of quarterly surveys. Customers have
34 indicated a reasonable level of satisfaction with Newfoundland Power's service
35 delivery over the last decade.⁴

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37 c) Newfoundland Power works closely with Parks Canada for all work within the
38 Terra Nova Park boundary. Newfoundland Power has a restricted activity permit
39 for operations within the park boundary. For the proposed *Distribution Reliability*
40 *Initiative* project specifically, Newfoundland Power has had discussions with Parks
41 Canada and understands that an environmental assessment and environmental
42 project plan will be required and coordinated with Parks Canada throughout the
43 duration of the project.

² See Electricity Canada's *Worst Performing Feeder Report 2023*.

³ See the Board's Provisional Guidelines, Appendix A, section I.B.

⁴ See the *2027 Capital Budget Application, 2027-2031 Capital Plan, Section 2.3 Operations Outlook*, page 3.

- d) Approximately 22%, or 69 of Newfoundland Power's 308 distribution feeders exceed the Company's corporate average on at least 3 of the 4 reliability metrics shown in Table 1 of the referenced report.
- e) See the response to part c).
- f) Newfoundland Power does not collect information regarding seasonal usage, or which customer properties are used for occasional use such as cabins. Newfoundland Power tracks customers according to rate class.⁵ Customers served by distribution feeder GLV-02 fall into residential, commercial and seasonal rate classes.⁶

A profile of the customers served by the 12-kilometre section of distribution feeder GLV-02 based on rate class is provided in Table 1.

Table 1 Customer Profile for 12-kilometre Section of GLV-02	
Customer Rate Class	Number of Customers
Residential	140
Commercial	41
Seasonal	1
Total	182

Of the 182 customers supplied by the 12-kilometre section of distribution feeder GLV-02, 161 customers have addresses in Charlottetown, specifically.

⁵ See Newfoundland Power's *Schedule of Rates, Rules and Regulations*.

⁶ Customers in the Seasonal rate class have opted in to the Rate 1.1S Domestic Seasonal-Optional rate. This rate class provides for differing energy charges in the winter season vs non-winter season. Enrollment in the seasonal rate class does not imply these customers are occupying these premises seasonally. Additionally, customers may be associated with cabins or other non-year-round usage that are not availing of the seasonal rate.

1 A profile of the customers served by the 5-kilometre section of distribution feeder
2 GLV-02 based on their rate class is provided in Table 2.

Table 2 Customer Profile for 5-kilometre Section of GLV-02	
Customer Rate Class	Number of Customers
Residential	954
Commercial	132
Seasonal	22
Total	1,108

3 g) See the response to part f).
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5 h) No. Distribution feeder GLV-02 originates from GLV Substation as a main three-
6 phase trunk feeder until it reaches the vicinity of Pine Tree Road, where it splits
7 into two independent branches. One branch extends south toward Charlottetown
8 and the other extends northeast toward Traytown, Sandringham and Eastport.
9 The two branches are independently protected by downline reclosers. As a result,
10 except in the case of a potential miscoordination event, the reliability
11 performance of one branch would not affect customers served from the other
12 branch.