

1 **Q. Please advise whether, in Newfoundland Power's opinion, the execution of the**
2 **following projects contribute to improved reliability performance for the feeders**
3 **being worked on, as would be demonstrated in improved SAIDI, SAIFI, etc.? If not,**
4 **why not?**

- 5
6 a) **Reconstruction project;**
7 b) **Rebuild Distribution Lines project;**
8 c) **Trunk Feeders project (Feeder GFS-06); and**
9 d) **Distribution Automation project.**

10
11 **A. A. General**

12
13 Newfoundland Power is of the opinion that execution of any capital project that
14 contributes to maintaining the overall condition of the electrical system would contribute
15 to maintaining the reliability of service delivered to customers.

16
17 The Company confirms that the capital projects listed above would contribute to
18 maintaining system condition and would therefore provide a reliability benefit to
19 customers. However, while individual capital projects may provide a reliability benefit to
20 customers, this reliability benefit is not necessarily the primary justification for a
21 particular project.

22
23 **B. Reliability-Related Capital Projects**

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25 For distribution capital expenditures, Newfoundland Power considers 2 projects to be
26 primarily aimed at improving the reliability experienced by customers on particular
27 feeders: (i) the *Distribution Reliability Initiative*; and (ii) *Rebuild Distribution Lines*.

28
29 Under the *Distribution Reliability Initiative*, capital expenditures are targeted towards the
30 Company's worst-performing feeders where customers experience significantly below-
31 average reliability. Under the *Rebuild Distribution Lines* project, deficiencies identified
32 through the Company's inspection program are addressed before they deteriorate to the
33 point where customer outages result.

34
35 In Newfoundland Power's opinion, improvements in the Company's overall reliability
36 performance since 1998 are principally due to the *Rebuild Distribution Lines* capital
37 project. Continued implementation of both the *Rebuild Distribution Lines* project and
38 *Distribution Reliability Initiative* is consistent with maintaining an overall acceptable
39 level of reliability for all customers.¹

¹ For information on Newfoundland Power's efforts to maintain system reliability, see response to Request for Information PUB-NP-001.

1 **C. Other Capital Projects**

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3 The other 3 capital projects listed above, specifically *Reconstruction*, *Trunk Feeders* and
4 *Distribution Automation*, provide a reliability benefit to customers on particular feeders,
5 but are primarily justified on other bases.

6
7 The *Reconstruction* project involves the replacement of deteriorated or damaged
8 distribution structures and electrical equipment. This project comprises smaller
9 unplanned projects that are identified through the inspection program or recognized
10 during follow-up on operational problems, including customer trouble calls.² Items
11 addressed in *Reconstruction* are typically items that have failed, are at imminent risk of
12 failure, or present a safety hazard to employees and the public. This project is therefore
13 primarily justified on the need to maintain safe and adequate facilities.³

14
15 The *Trunk Feeder* project consists of individual high priority projects that arise from
16 preventive maintenance inspections or engineering reviews that are beyond the scope of
17 other Distribution projects. In 2020, the GFS-06 Distribution Feeder Refurbishment
18 *Trunk Feeder* project involves the refurbishment of deteriorated distribution structures
19 and equipment.⁴ This line has been damaged in recent years by storms.⁵ Similar to
20 *Reconstruction*, this project is also primarily justified on the need to maintain safe and
21 adequate facilities.

22
23 The *Distribution Automation* project is a key component in ensuring the efficient delivery
24 of reliable service to customers. This project is focused on the installation of downline
25 reclosers in areas that will improve system resilience and the flexibility to respond to both
26 major disruptions and local system events. This project is primarily justified on the need
27 to ensure the most efficient operation of the electrical system in a manner consistent with
28 reliable service delivery to customers.⁶

29
30 In Newfoundland Power's opinion, reliability improvements to customers on particular
31 feeders is a reasonable benefit to expect from capital projects such as these, which aim to
32 maintain overall electrical system condition.

² Items from the Company's inspection program that are included in the *Reconstruction* project consist of high priority items that cannot wait until the next budget year's *Rebuild Distribution Lines* project to be completed.

³ See Section 37(1) of the *Public Utilities Act*.

⁴ This project involves rebuilding 20 km of deteriorated distribution line consisting of #2 ACSR conductor which is now considered substandard due to its poor operating characteristics in Newfoundland's climate. It also includes relocating 3 km of distribution structures from the Exploits River.

⁵ For example, an ice storm in November 2013 caused significant damage to GFS-06, resulting in 1.7 million customer outage minutes to customers in Badger and surrounding area.

⁶ See Section 3(b)(i) of the *Electrical Power Control Act, 1994*.