

- 1 **Q. (Reference Application, 2025 – 2029 Capital Plan, page 14) With respect to**
 2 **the increasing expenditures in the renewal classification:**
 3 **a) Are there offsetting operating and maintenance cost savings associated**
 4 **with these projects/programs? If so, please quantify such savings.**
 5 **b) Is there value in slowing expenditures in this category until the results of**
 6 **the asset management review are available?**
 7 **c) What steps are being taken by NP to offset the increasing costs in the**
 8 **renewal category, or is NP taking a “business-as-usual” approach?**

- 9
 10 A. a) Renewal expenditures are primarily driven by the age and condition of
 11 Newfoundland Power’s electrical system. Renewal investments account for nearly
 12 half of renewal expenditures in 2025 and are forecast to account for approximately
 13 60% of the capital expenditures from 2025 to 2029¹. This investment classification
 14 includes Newfoundland Power’s preventative and corrective maintenance programs.²

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 16 Examples of corrective maintenance programs included in the Renewal Investment
 17 Classification are the *Reconstruction, Substation Replacements Due to In-Service*
 18 *Failures*, and *Replacement Street Lighting* programs. These programs are necessary
 19 to correct distribution infrastructure that fails in service. Without the ability to repair
 20 or replace equipment that has already failed, Newfoundland Power would not be
 21 able to maintain facilities that are reasonably safe and adequate.

22
 23 The Renewal Investment Classification also includes preventative maintenance
 24 projects and programs as well as projects and programs that are both corrective and
 25 preventative in nature. The *Rebuild Distribution Lines* program is the Company’s
 26 preventative maintenance programs for its distribution feeders and equipment.
 27 Corrective and preventative programs include the *Replacement Transformers* and
 28 *Transmission Line Maintenance* programs. Corrective and Preventative maintenance
 29 projects include Newfoundland Power’s *Substation Refurbishment and Modernization*
 30 *projects*, the *Transmission Line 94L Rebuild* project, the *Mobile Hydro Plant Penstock*
 31 *Refurbishment* project, and the *Mount Carmel Pond Dam Refurbishment* project.

32
 33 All of the expenditures associated with the Renewal Investment Classification are
 34 necessary to either correct equipment that has already failed or is at imminent risk
 35 of failure or to maintain facilities and equipment that are reasonably safe and
 36 adequate. Newfoundland Power employs a variety of measures to ensure that all of
 37 the capital expenditures included in the *2025 Capital Budget Application* are
 38 executed in a manner that is least cost for customers. Examples of these measures
 39 include:
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¹ See Newfoundland Power’s *2025 Capital Budget Application, 2025-2029 Capital Plan*, page 14.

² For a breakdown of projects and programs by investment classification, see Newfoundland Power’s *2025 Capital Budget Application, 2025 Capital Budget Overview*, Appendix A.

- 1 (i) An assessment of alternatives for capital projects. When multiple viable
 2 alternatives are identified, a net present value ("NPV") analysis is
 3 conducted to identify the least cost solution.³
- 4 (ii) The coordination of capital projects, when possible, to meet the electrical
 5 system requirements at the lowest possible cost consistent with safe and
 6 reliable service.⁴
- 7 (iii) Refurbishment of hydroelectric generating plants ("Plant"). A lifecycle cost
 8 analysis for each proposed Plant is completed to determine if the
 9 continued operation of the Plant's production will provide a net benefit to
 10 customers when compared to the cost of replacement production.⁵

11
 12 Failure to maintain the Company's electrical system would result in increased
 13 equipment failures and customer outages. In Newfoundland Power's view,
 14 maintaining current levels of system reliability is least cost for customers.⁶
 15 Maintaining current levels of reliability requires routine expenditures to maintain the
 16 condition of the electrical system such as those included in the Renewal Investment
 17 Classification. In Newfoundland Power's view, executing planned preventative work
 18 is more efficient and less costly than responding in an unplanned fashion to in-
 19 service failures.⁷ A failure to execute work in a planned fashion would increase
 20 operational expenditures required to restore service to customers and would be
 21 detrimental to the productivity of Newfoundland Power's operations.

22
 23 Newfoundland Power has not quantified the avoided capital and operating costs that
 24 result from all of its preventative maintenance activities.⁸ Routine capital

³ For example, see Newfoundland Power's *2025 Capital Budget Application*, report *3.2 Transmission Line 94L Rebuild*, pages 5 to 10 and report *3.1 Gander - Twillingate Transmission System Planning Study*, pages 12 to 25.

⁴ For example, see Newfoundland Power's *2025 Capital Budget Application*, report *3.1 Gander - Twillingate Transmission System Planning Study*, pages 12 to 25. In addition, the refurbishment and modernization of individual substations under Newfoundland Power's *Substation Refurbishment and Modernization Plan* has been shown to be the least cost approach to substation maintenance compared to the replacement of specific substation components. See Newfoundland Power's *2025 Capital Budget Application*, report *2.1 2025 Substation Refurbishment and Modernization*, section 3.0 – Assessment of Alternatives.

⁵ For example, Newfoundland Power's *2025 Capital Budget Application*, report *4.1 Mount Carmel Pond Dam Refurbishment*, Appendix A: *Lifecycle Cost Analysis of the Cape Broyle-Horse Chops Hydroelectric Development* and report *2.1 2025 Substation Refurbishment and Modernization*, Appendix C: *Lockston Substation Refurbishment and Modernization*, Attachment A.

⁶ For more information on the relationship between reliability and cost, see the response to Request for Information CA-NP-015.

⁷ The most recent independent review of Newfoundland Power's engineered operations was conducted by The Liberty Consulting Group ("Liberty") in 2014 and found that the Company's asset management practices and operations conform to good utility practices. See Liberty, *Executive Summary of Report on Island Interconnected System to Interconnection with Muskrat Falls addressing Newfoundland Power Inc.*, December 17, 2014, page ES-1.

⁸ The estimate of customer benefits associated with hydro plant refurbishments and the Company's LED Street Lighting Replacement project on Newfoundland Power's annual revenue requirement is approximately \$11 million on a *pro forma* basis. See Newfoundland Power's *2025 Capital Budget Application*, *2025 Capital Budget Overview*, page 10.

1 expenditures associated with corrective and preventative maintenance are justified
2 on the basis of maintaining reasonably safe and adequate facilities and have been
3 shown to be executed in a manner that is lowest cost for customers.
4

- 5 b) See part a). Slowing expenditures in the Renewal Investment Classification would
6 require Newfoundland Power to stop addressing equipment that has already failed or
7 to slow its preventative maintenance activities. This would result in a degradation of
8 system reliability. In the Company's view, allowing reliability performance to degrade
9 over time would not be prudent for two reasons. The first reason is that upcoming
10 risks to the Company's ability to manage system reliability underscore the
11 importance of maintaining current levels of reliability performance experienced by
12 customers.⁹ The second reason is that intentionally allowing system reliability to
13 degrade would not contribute to the delivery of least-cost electrical service to
14 customers.
15

16 Newfoundland Power does not anticipate that its asset management review will
17 result in a cessation of expenditures associated with corrective and preventative
18 maintenance of the electricity system.
19

20 In Newfoundland Power's view, maintaining current levels of reliability is least-cost
21 for customers. For more information on the relationship between reliability and cost,
22 see the response to Request for Information CA-NP-015. For more information on
23 the asset management review see response to Request for Information PUB-NP-040.
24

- 25 c) Increasing costs in the Renewal Investment Classification are largely associated with
26 aging infrastructure. A significant portion of the Company's electrical system assets
27 were constructed in the 1960s and 1970s. As a result, a large quantity of assets with
28 expected useful service lives of between 50 and 60 years are now aging beyond
29 their expected useful service lives. Newfoundland Power's aging assets are expected
30 to result in increased levels of asset replacement and will be a primary driver of
31 capital spending over the next five years. Newfoundland Power also observes that, in
32 recent years, the cost of materials used as part of the Company's capital program
33 have increased.
34

35 Newfoundland Power's investment priorities over the next five years reflect an
36 increased focus on the planned refurbishment of assets to extend their useful service
37 lives and the replacement of assets that become deteriorated or fail in service. The
38 refurbishment and replacement of existing assets is forecast to account for an
39 average of approximately \$98 million of annual capital expenditures from 2025 to
40 2029, or 60% of total annual expenditures.¹⁰ As stated in part a) of this response,
41 Newfoundland Power utilizes a number of measures to ensure that the Company
42 continues to meet its legal obligation to supply safe, adequate and reliable service to
43 customers in a manner that is lowest cost.

⁹ Upcoming risks to service reliability include aging infrastructure, increased weather events, bulk transmission reliability, and electrification initiatives.

¹⁰ See Newfoundland Power's *2025 Capital Budget Application, 2025-2029 Capital Plan*, page 1.