

1 **Reference: "2023 Capital Budget Application," Newfoundland Power Inc., June 29,**
 2 **2022, 2023–2027 Capital Plan, p. 1, para. 5.**

3
 4 **Q. Newfoundland Power's investment priorities over the next five**
 5 **years reflect an increased focus on the planned refurbishment of**
 6 **assets to extend their useful service lives and the replacement of**
 7 **assets that become deteriorated or fail in service.**

8
 9 **a) Please specify what is changing from the current focus in**
 10 **Newfoundland Power's investment priorities, and the reason for any**
 11 **such changes.**

12
 13 **b) Please quantify the additional cost reflected in the five-year plan as a**
 14 **result of this increased focus on these activities.**

15
 16 **c) Based on the quantification, please estimate the projected annual**
 17 **capital expenditures for the five-year plan if this increased focus on**
 18 **refurbishments and replacements is not implemented.**

19
 20 A. a) Newfoundland Power's planned refurbishment and replacement of electrical
 21 system assets is explained in *Section 2.4 Asset Condition Outlook* of its *2023-*
 22 *2027 Capital Plan*.

23
 24 As described in that section, a significant portion of Newfoundland Power's
 25 electrical system assets were constructed in the 1960s and 1970s following
 26 provincial electrification efforts in rural areas. A high quantity of assets that have
 27 been in service for between 50 and 60 years are aging beyond their expected
 28 useful service lives, resulting in a forecast increase in requirements to refurbish
 29 and replace electrical system assets going forward.

30
 31 For example, approximately 23% of distribution overhead conductor has
 32 currently exceeded the average industry expected useful service life of 50 years.
 33 An additional 22% of distribution overhead conductor will reach 50 years in
 34 service within the next decade.¹ The condition of overhead conductor will
 35 degrade with age, resulting in an increased risk of equipment failure and
 36 customer outages.² Maintaining reliable service for customers is therefore
 37 expected to require increased investment on the planned refurbishment and
 38 replacement of distribution overhead conductor, among other aging assets.

39
 40 b) The planned refurbishment and replacement of electrical system assets, which
 41 are classified as "Renewal" expenditures, are forecast to account for
 42 approximately 54% of capital expenditures from 2023 to 2027. This compares to
 43 approximately 43% over the previous five-year period, representing an average

¹ See the *2022 Capital Budget Application, 2023-2027 Capital Plan*, page 8.

² The effect of Newfoundland Power's aging distribution overhead conductor can be observed through its recent experience with equipment failures. On average, 188 conductor failures occurred annually from 2012 to 2016. This compares to an average of approximately 327 conductor failures annually from 2017 to 2021.

- 1 increase in annual capital expenditures of approximately \$26 million over this
2 period. For more information, see *Section 3.2 Planned Expenditures by*
3 *Investment Classification* of the *2023-2027 Capital Plan*.
4
- 5 c) As described in part b), Newfoundland Power estimates that its annual capital
6 expenditures over the next five years would be reduced by approximately
7 \$26 million annually if the replacement and refurbishment of electrical system
8 assets remained consistent with historical investment levels. However, based on
9 the age of the Company's electrical system, maintaining these investments at
10 historical levels is not expected to be sufficient to provide safe and reliable
11 service to customers going forward.