

1 **Q. (Reference Application) What is the overall improvement in productivity stemming**
2 **from the projects included in the 2022 Capital Budget Application? Please identify**
3 **the expected cost savings and provide an estimate of the impact on rates.**
4

5 A. Newfoundland Power's 2022 *Capital Budget Application* includes: (i) projects that will
6 maintain the productivity of its operations; and (ii) projects that will improve the
7 productivity of its operations. These include:
8

9 (i) The *Workforce Management System Replacement* project. Replacement of
10 Newfoundland Power's Workforce Management System will allow the Company
11 to maintain current levels of productivity for dispatching and monitoring field
12 crews. A net present value ("NPV") analysis determined that replacing the
13 system would reduce costs to customers by approximately \$499,000 over 7 years
14 in comparison to implementing manual workforce management processes.¹
15

16 (ii) The *LED Street Lighting Replacement* project. The replacement of High Pressure
17 Sodium ("HPS") street lights with more reliable LED street lights commenced in
18 2021 and is proposed to continue in 2022.² The replacement of all HPS street
19 lights with LED street lights will reduce street light energy and maintenance costs
20 to customers by approximately \$52 million over 20 years.³
21

22 (iii) The *Customer Service System Replacement* project. Over the last 2 decades,
23 Newfoundland Power reduced its customer service costs by over 40%, while
24 serving more customers and responding to nearly triple the number of customer
25 enquiries. Replacement of the Company's Customer Service System was
26 approved to commence in 2021 and will continue throughout 2022. This project
27 will enable the Company to maintain the productivity of its customer service
28 delivery.⁴
29

30 (iv) The *2022 Application Enhancements* project. This project includes 3 items that
31 will improve the productivity of Newfoundland Power's operations through the
32 reduction or elimination of manual processes.⁵ For information on the expected
33 cost savings resulting from this project, see response to Request for Information
34 CA-NP-087.
35

36 (v) The *Distribution Feeder Automation* project. This project will increase
37 automation in the Company's distribution system through the addition of
38 automated downline reclosers and fault indicators.⁶ The deployment of
39 automated distribution equipment will enhance the Company's response to

¹ See the 2022 *Capital Budget Application, Report 7.3 Workforce Management System Replacement, Appendix A*, page 9.

² See the 2021 *Capital Budget Application, Volume 1, LED Street Lighting Replacement Plan*.

³ See the 2021 *Capital Budget Application, Volume 1, LED Street Lighting Replacement Plan*, page 10.

⁴ See the 2021 *Capital Budget Application, Volume 1, Customer Service Continuity Plan*, pages 3 to 4.

⁵ See the 2022 *Capital Budget Application, Report 7.1 2022 Application Enhancements*.

⁶ See the 2022 *Capital Budget Application, Schedule B*, pages 50 to 51.

1 customer outages in all operating conditions, including local and system-wide
2 outages. For example, the operation of 5 downline reclosers during a severe
3 blizzard in January 2020 avoided approximately 3.5 million customer outage
4 minutes without the assistance of field crews.
5

6 Additionally, over 50% of proposed 2022 capital expenditures are driven by the
7 replacement of existing plant.⁷ These expenditures are required to maintain the condition
8 of the electrical system and provide reliable service to customers. Failure to maintain the
9 Company's electrical system would result in increased equipment failures and customer
10 outages. This would increase operational expenditures required to restore service to
11 customers and would be detrimental to the productivity of Newfoundland Power's
12 operations.
13

14 The relationship between Newfoundland Power's capital expenditures and its revenue
15 requirements or customer rates is not a direct one.⁸ The Board has previously recognized
16 the complex relationship between capital investments, revenue requirements and
17 customer rates. In Order No. P.U. 40 (2005), the Board stated:
18

19 *"NP undertakes a capital program and incurs capital expenditures each year*
20 *and these expenditures impact the revenue requirement in other ways, in*
21 *addition to depreciation. The portion of capital expenditures incurred for*
22 *example as a result of customer growth will be offset somewhat by higher*
23 *revenues from increased energy sales. Other capital expenditures may impact*
24 *maintenance expenses...these expenses are properly dealt with in the context*
25 *of a general rate application."*⁹
26

27 Due to the complex nature of how capital expenditures impact customer rates,
28 Newfoundland Power does not assess the customer rate impact of its capital projects as
29 requested.

⁷ See the 2022 Capital Budget Application, 2022 Capital Plan, page 3, Figure 1.

⁸ See the 2022 Capital Budget Application, 2022 Capital Plan, Section 2.3 Capital Investment and Customer Costs, for a discussion on the relationship between the Company's capital investments, revenue requirements and customer rates.

⁹ See Order No. P.U. 40 (2005), page 13.