

1 **Reference: 2023 Capital Budget Overview**

2

3 **Q. a) In referencing deferred projects, what factors did Newfoundland Power**

4 **take into account in making the original deferral decision and what factors**

5 **were subsequently reviewed as part of the engineering assessment that**

6 **led to the decision to include the previously deferred projects in the 2023**

7 **capital budget?**

8

9 **b) What factors did Newfoundland Power take into account in making the**

10 **decision to defer projects planned for the 2023 to subsequent years?**

11

12 A. a) Before any expenditure is included in Newfoundland Power's capital budget

13 applications, the Company assesses whether the expenditure is necessary to: (i)

14 meet federal or provincial laws; (ii) provide customers with equitable access to an

15 adequate supply of power; (iii) provide reliable service to customers at least cost; or

16 (iv) maintain safe and adequate facilities in serving customers. Only those

17 expenditures determined to be necessary to meet one or more of these

18 requirements are proposed for Board approval. All other expenditures are deferred

19 or removed entirely from Newfoundland Power's capital plan.

20

21 Planned capital expenditures may be deferred based on various factors.

22 Expenditures may be deferred based on new information, such as updated

23 inspection results that show an asset is in better than expected condition.

24 Expenditures may also be deferred based on assessments of alternatives that

25 identify a solution exists that does not require capital expenditures, such as an

26 opportunity to transfer customer load from one substation to another. Such factors

27 can result in planned capital expenditures being deferred for several years.

28

29 When capital expenditures are deferred over the short term, such as from the

30 upcoming budget cycle to the next, it is typically the result of requiring more detailed

31 analysis. This information may be required to confirm that a planned expenditure is

32 justified, adequately detailed in terms of its scope and cost estimate, and the least

33 cost alternative for customers.

34

35 Newfoundland Power's *2023 Capital Budget Application* identifies five capital projects

36 that are proposed for Board approval after being deferred from previous years.¹ All

37 five of these capital projects were deferred to permit further engineering

38 assessments, which have since been completed. The five capital projects are:

39

40 (i) *Mobile Hydro Plant Refurbishment*

41 The refurbishment of the Mobile Hydro Plant was planned to be completed in

42 2022.² This project was deferred in order to determine the specifications and

¹ See the *2023 Capital Budget Application, 2023 Capital Budget Overview*, Appendix B, Table B-1. Table B-1 also includes two Information Systems projects that were modified from what was originally planned.

² The five-year capital plan filed with the *2019 Capital Budget Application* included the refurbishment and modernization of the Mobile Hydro Plant in 2022.

1 size of the replacement switchgear required to eliminate the existing arc flash
2 hazards, including the scope of associated building modifications.
3

4 (ii) *Sandy Brook Hydro Plant Generator Refurbishment*

5 The refurbishment of the Sandy Brook Hydro Plant was planned to be
6 completed in 2020.³ In 2019, it was determined that a third-party
7 engineering assessment was required to confirm replacement of the plant
8 penstock was necessary.⁴ The *Sandy Brook Plant Penstock Replacement*
9 project was subsequently included in the *2022 Capital Budget Application* as
10 a multi-year project. Refurbishment of the generator is proposed to be
11 completed in 2023 while the plant is out of service for penstock replacement.
12

13 (iii) *Molloy's Lane Substation Refurbishment and Modernization*

14 The refurbishment and modernization of Molloy's Lane Substation was
15 planned to be completed in 2021.⁵ In 2020, it was determined that the
16 66 kV wooden bus structure was deteriorated and required replacement. An
17 additional assessment was required to determine the least cost approach to
18 accommodate replacement of the wood pole structures within the existing
19 substation footprint.
20

21 (iv) *Walbournes Substation Refurbishment and Modernization*

22 The refurbishment and modernization of Walbournes Substation was planned
23 to be completed in 2022.⁶ In 2021, it was determined that the switchgear
24 required replacement with outdoor breakers and bus structure. An additional
25 assessment was required to determine the least cost approach to replace the
26 switchgear and whether the substation yard could accommodate replacement
27 of the switchgear with outdoor equipment.
28

29 (v) *Transmission Line 55L Rebuild*

30 Transmission Line 55L was originally planned to be rebuilt in 2007, but was
31 deferred through routine maintenance. The rebuilding of Transmission Line
32 55L was most recently planned to be completed in 2022.⁷ In 2021, it was
33 determined that a further assessment of alternatives was required to identify
34 the least cost approach to addressing the deteriorated condition of the
35 transmission line.⁸

³ The five-year capital plan filed with the *2019 Capital Budget Application* included the refurbishment of the Sandy Brook Hydro Plant in 2020.

⁴ See the *2022 Capital Budget Application*, report 1.2 *Sandy Brook Penstock Replacement*, Appendix B for the *Penstock Inspection Summary Report* prepared by Kleinschmidt Associates Canada Inc.

⁵ The five-year capital plan filed with the *2019 Capital Budget Application* included the refurbishment and modernization of Molloy's Lane Substation in 2021.

⁶ The five-year capital plan filed with the *2018 Capital Budget Application* included the refurbishment and modernization of Walbournes Substation in 2022.

⁷ The five-year capital plan filed with the *2018 Capital Budget Application* included the rebuild of Transmission Line 55L in 2022.

⁸ See the *2023 Capital Budget Application*, report 3.1 *2023 Transmission Line Rebuild*, Section 4.0 *Assessment of Alternatives*.

1 b) Newfoundland Power's *2023 Capital Budget Application* identifies five capital projects
2 that were originally planned for 2023 that have been deferred to subsequent years.⁹
3 It was determined that all five projects required additional engineering assessments
4 prior to being proposed for Board approval. The five capital projects are:
5

6 (i) *Transmission Line 108L Rebuild*

7 This project requires the completion of a system planning study of the radial
8 transmission system supplying Gander Bay and Boyd's Cove substations to
9 determine the least cost approach to address the deteriorated condition of
10 Transmission Line 108L. The non-standard transmission line configuration of
11 Transmission Line 142L from Cobbs Pond Substation to Boyd's Cove
12 Substation also needs to be further assessed as part of the planning study,
13 which is not yet completed.
14

15 (ii) *Memorial Substation Refurbishment and Modernization*

16 The equipment at Memorial Substation is owned by both Newfoundland
17 Power and Memorial University. This project has been deferred to coordinate
18 with planned refurbishment work to be completed on the equipment owned
19 by Memorial University, which is currently being assessed.
20

21 (iii) *Broad Cove Substation Refurbishment and Modernization*

22 An additional engineering assessment is required to determine the least cost
23 approach to refurbish the deteriorated equipment within the existing
24 substation footprint. The location of the substation presents challenges for
25 transmission line and distribution feeders with respect to the space available
26 to exit the substation, which also requires further assessment.
27

28 (iv) *Lockston Substation Refurbishment and Modernization*

29 The existing substation configuration includes transformers operating at the
30 non-standard voltage of 46 kV. Further assessment is required to determine
31 whether there is an opportunity to reduce the number of transformers in
32 service by removing the three 46 kV substation transformers and replacing
33 them with a single new power transformer.¹⁰
34

35 (v) *Kenmount Road Building Emergency Diesel and Main Electrical Upgrade*

36 Additional engineering assessment and planning is required to determine the
37 least cost approach to replace the existing equipment while maintaining
38 electrical service to the building during construction.

⁹ See the *2023 Capital Budget Application, 2023 Capital Budget Overview*, Appendix B, Table B-2.

¹⁰ An existing power transformer needs to be replaced before 2025 due to the presence of PCB levels that exceed government regulations.