

3.2 Transmission Line 94L Rebuild

Q. Pages 4-5. Newfoundland Power states that in early 2023 it issued the tender for Scope 1 and received higher than anticipated contractor pricing, and that the pricing received for Scope 2 was also higher than anticipated, resulting in an increase to the overall forecasted cost of the Project.

a) Please complete the following table comparing the budgeted costs when this project was initially approved to the actual/forecast costs for each year. In the response, please also include any associated distribution costs resulting from revising the project scope.

Transmission Line 94L Rebuild		
Year	Original Budget	Actual/Forecast Cost
2022		
2023		
2024		
2025		
2026		

b) Please explain why the higher contractor pricing was not noted in Newfoundland Power’s 2024 Capital Budget Application filed in June 2023, where on page 18 of the 2024 Capital Budget Overview it is stated that there has been no change in the nature, scope or magnitude of this project.

c) Please outline Newfoundland Power’s rationale for continuing to spend capital on the project prior to further evaluation from the Board.

d) Given the approved budget estimates for 94L were significantly less than the actual and projected costs to complete the project, does this under-budgeting indicate potential issues with the original estimation process? What lessons have been learned from this project to apply to budget development for future projects?

- 1 A. a) Table 1 below compares the budgeted cost for the *Transmission Line 94L Rebuild*
 2 project when it was originally approved to the actual/forecast costs for each year.

Table 1: Transmission Line 94L Rebuild Project Original Budget vs. Actual/Forecast Cost (\$000s)		
Year	Original Budget	Actual/Forecast Cost
2022	4,473	552
2023	4,346	7,347
2024	4,276	3,327
2025	-	4,134
2026	-	10,215

3 Table 1 includes all associated distribution costs resulting from revising the project
 4 scope.

- 5
 6 b) Newfoundland Power received the higher than anticipated contractor pricing for
 7 Scope 1 of the *Transmission Line 94L Rebuild* project in April of 2023. As discussed
 8 in Report 3.2 – *Transmission Line 94L Rebuild*, after receiving this contractor pricing
 9 the company reviewed other routing options for Scope 1 of the Project, including
 10 relocating all of Scope 1 roadside between Riverhead and St. Catherine’s
 11 substations. However, this route increased the total length of line and required a
 12 significant portion to be constructed in an under-build configuration with the existing
 13 SCT-02 distribution feeder, increasing the cost above the originally proposed route.
 14 Based on this, Newfoundland Power proceeded with Scope 1 of the Project as it
 15 remained the least-cost option for customers.

16
 17 The tender pricing which was received for Scope 1 increased the overall Project
 18 forecast to roughly 14% above the originally approved budget. At this level of
 19 projected overspend, the Company intended to execute Scope 1 of the Project and
 20 manage the cost through construction while explaining the variance to the Board
 21 following the completion of Scope 1. While Scope 1 was being executed, the
 22 Company received tender pricing on Scope 2 in July 2023, which was again higher
 23 than expected. This contractor pricing pushed the overall forecasted cost of the
 24 Project to be 38% over the original estimate, at which point the Company decided
 25 not to award Scope 2 and to instead complete a total review of the Project. The
 26 review included an assessment of alternatives to ensure the previously approved
 27 alternative was still the least cost option for customers.¹

¹ See Newfoundland Power’s *2025 Capital Budget Application*, report 3.2 *Transmission Line 94L Rebuild*, page 5.

1 Throughout the review, Newfoundland Power attempted to gain a full understanding
2 of the drivers behind the higher than expected costs, potential methods of mitigating
3 those costs during the project, and whether similar costs should be expected for
4 Scope 3 of the Project.
5

6 The review of the Project took significant time, and was completed after the filing of
7 the *2024 Capital Budget Application*. At the time of filing, the Company had not
8 received the contractor pricing for Scope 2 which caused the significant increase
9 from the originally approved Project budget. Without this information, Newfoundland
10 Power was not yet in a position to inform the Board of changes to the Project's
11 nature, scope or magnitude.
12

13 The next subsequent correspondence between Newfoundland Power and the Board
14 following the submission of the *2024 Capital Budget Application* was the Introductory
15 Presentation, presented on July 26, 2023, at which point the Scope 2 contractor
16 pricing had been received. In this presentation, Newfoundland Power identified that
17 Scope 1 of the Transmission Line 94L Rebuild Project was underway, but Scopes 2
18 and 3 were being reviewed due to overall Project cost increases.
19

20 c) In 2024, Newfoundland Power intends to continue to spend capital from its originally
21 approved 2024 Capital Budget to complete the construction of approximately 3.5km
22 of transmission line between the St. Catherine's substation to Transmission Line
23 94L's intersection with Route 91. This section of line is common to both alternatives
24 that were considered in the alternative analysis completed for the *Transmission Line*
25 *94L Rebuild* project.
26

27 With this section of line being required for both alternatives, it removes risk of the
28 newly-constructed infrastructure from becoming stranded. Whether the remainder of
29 the Project from Route 91 to Blaketown is constructed roadside, as currently
30 proposed, or in the back country route originally approved, this 3.5km section will be
31 put into service to the benefit of Newfoundland Power customers in the area,
32 ensuring the continued supply of safe, reliable power.
33

34 d) Newfoundland Power's estimating process used for transmission line rebuild projects
35 has yielded an acceptable level of accuracy throughout the execution of its
36 *Transmission Line Rebuild Strategy*.
37

38 Excluding the *Transmission Line 94L Rebuild* project which encountered unique
39 terrain conditions resulting in additional costs beyond the original budget,
40 historically, Newfoundland Power's ability to accurately estimate project costs related
41 to contract labour has been satisfactory. Between 2018 and 2022, Newfoundland
42 Power submitted 14 different transmission line rebuild project estimates as a part of
43 its annual Capital Budget Applications. Across those 14 projects, the average
44 variance of the estimated contract labour costs against the actual contract labour
45 bids received is approximately +2.14%. This minimal level of variance demonstrates
46 Newfoundland Power's ability to accurately estimate contract labour costs.

1 The Company has, however, taken steps to minimize the risk of future projects
2 experiencing similar issues as those encountered by the *Transmission Line 94L*
3 *Rebuild* project.
4
5 Starting with the *Transmission Line 146L Rebuild* project, which was approved as
6 part of Newfoundland Power's *2024 Capital Budget Application*, the Company has
7 moved to a new project execution approach for its multi-year *Transmission Line*
8 *Rebuild* projects. The previous approach was to complete all project work on
9 individual segments of line in their entirety in each year of a project. The new
10 approach involves the completion of the full detailed line design, procurement, and
11 vegetation right-of-way clearing in the first year of the project, with line construction
12 starting in the second year.²

² For example, the previous approach on a 40 km transmission line would involve rebuilding 20 km in Year 1 and 20 km in Year 2. The new approach focuses on completing design, procurement and vegetation work in Year 1, with construction on the entire 40 km line occurring in Year 2