Transmission

Q. Reference: "2025 Capital Budget Application," Newfoundland Power Inc., June 28, 2024, Supporting Materials, Transmission: 3.1, sec. 3.0, pp. 12–20.
a) Please provide a breakdown of operating and maintenance costs and/or other costs utilized as inputs for the cost-benefit analysis for each alternative.
b) Please provide a listing, including costs, for each of the "Future Rebuilds" referenced in the capital costs table for each alternative.
c) Please confirm that there are no additional capital costs that are necessitated by each alternative, other than those listed in the capital cost tables.

A. a) See the response to Request for Information PUB-NP-032, part a).

b) Table 1 provides the capital costs for the future rebuilds associated with Alternatives 1 and 3.

Table 1
Alternatives 1 and 3 - Expected Future Rebuilds
2030 – 2036 Period
(2025 $000's)

Description	Capital Cost
Rebuild Transmission Line 142L	16,600
Rebuild 22 km section of Transmission Line 114L	7,200
Refurbishment & Modernization of JON Substation	1,600
Total	25,400

Alternatives 1 and 3 are based on Transmission Line 108L being rebuilt, and the replacement for Gander ("GAN") Substation system power transformer GAN-T2 being installed at GAN Substation.

Table 2 provides the capital costs for the future rebuilds associated with Alternative 2.

Table 2
Alternative 2 - Expected Future Rebuilds
2030 – 2036 Period
(2025 $000's)

Description	Capital Cost
Rebuild Transmission Line 142L	16,600
Rebuild 20 km Section of Transmission Line 114L	6,700
Total	23,300

Alternative 2 involves the construction of a new 138 kV transmission line between Lewisporte ("LEW") and Boyd's Cove ("BOY") substations, and the GAN-T2 replacement being installed at BOY Substation.

The 2025 to 2027 capital costs associated with Alternative 2 include rebuilding approximately 2 km of Transmission Line 114L as part of a double-circuit extension of Transmission Line 142L to facilitate the normal supply to Gander Bay ("GBY") Substation to be transferred to BOY Substation through Transmission Line 114L.[1] As a result, capital expenditures associated with rebuilding the remaining 20 km section of Transmission Line 114L between GBY and BOY substations provided in Table 2 have been reduced relative to those of rebuilding the entire transmission line as provided Table 1. Similarly, Alternative 2 facilitates the retirement of Jonathan's Pond ("JON") Substation and includes costs associated with constructing a single-phase extension to supply existing JON Substation customers from Cobb's Pond ("COB") Substation distribution feeder COB-02. As a result, Table 2 also excludes costs associated with refurbishing and modernizing JON Substation.

c) It is confirmed that the capital costs provided for each alternative assessed in report *3.1 Gander-Twillingate Transmission System Planning Study* include all expected costs associated with each alternative. For example, Alternative 2 includes provisions for: (i) constructing a single-phase extension of distribution feeder COB-02 to maintain supply to customer served by JON Substation following the retirement of the substation; (ii) a 138 kV grounding transformer to maintain a ground source at GAN Substation following the relocation of GAN-T2; (iii) extensions of existing transmission lines to maintain supply to GBY Substation and 104L; and (iv) necessary upgrades to LEW and BOY substations to facilitate the construction of the newly proposed 138 kV transmission line.

[1] In the existing transmission configuration, as well as the configurations proposed in Alternatives 1 and 3, normal supply to GBY Substation would be maintained through Transmission Line 108L served by GAN Substation system power transformer GAN-T2.