Q. What range of alternatives for all capital projects proposed has Newfoundland Power filed with this Application? List the range of alternatives for each and every capital project proposed.

A. Newfoundland Power's *2024 Capital Budget Application* is filed in accordance with the Provisional Guidelines. The Provisional Guidelines outline the requirements for alternatives to be considered for capital projects and programs.[1] Alternatives are to be considered for capital projects and programs with a materiality greater than $1 million for the Mandatory, Renewal, System Growth, Service Enhancement, and General Plant investment classifications.

Newfoundland Power considered all alternatives listed in the Provisional Guidelines when assessing alternatives for projects and programs.[2] The relevance of the listed alternatives varies depending on the nature of individual projects and programs. The *Assessment of Alternatives* sections of *Schedule B* of Newfoundland Power's *2024 Capital Budget Application* discuss only those alternatives the Company has identified as relevant. Cost-benefit analyses, net present value ("NPV") calculations, or levelized cost of energy analyses are provided for projects and programs where multiple viable alternatives were identified in order to determine the least-cost alternative.

There are four capital projects where a cost-benefit analysis, a NPV calculation, or levelized cost of energy analysis are appropriate. These are the: (i) *Lookout Brook Hydro Plant Refurbishment* project; (ii) *LED Street Lighting Replacement* project; (iii) *Transmission Line 146L Rebuild* project; and (iv) *Application Enhancements* project.

Attachment A provides the alternatives considered for each of the four projects where a NPV calculation, levelized cost of energy or cost benefit analysis are appropriate.

In addition to the four projects listed in Attachment A, the *Feeder Additions for Load Growth* project evaluates alternatives for overloaded conductor on distribution feeders as part of the Company's comprehensive planning process. Report *1.2 Feeder Additions for Load Growth* identifies five alternatives for dealing with overloaded conductor. These alternatives include feeder balancing, load transfers, feeder upgrade, new feeder, and non-wires alternatives.[3] The report details how each of the five alternatives were evaluated for each of the distribution feeders exhibiting overload conditions.

1 See the Provisional Guidelines, Appendix A, Section III.
2 Ibid.
3 See Newfoundland Power's *2024 Capital Budget Application,* report *1.2 Feeder Additions for Load Growth*, page 2.

ATTACHMENT A:

Capital Project Alternatives and Results

Alternatives Analysis for Capital Projects		
Capital Project	Alternatives	Economic Analysis
Lookout Brook Hydro Plant Refurbishment	1. Refurbish Plant in 2024/2025 2. Defer Refurbishment to a Future Year	Levelized cost of production is 3.52 ¢/kWh. Net capacity benefit of between 2.11 ¢/kWh and 2.97 ¢/kWh.
LED Street Lighting Replacement	1. Current Approach 2. LED Replacement program	1. $31,854,000 2. $27,000,000 The NPV results indicate that the LED replacement program reduces costs to customers by approximately $4.9 million over 20 years.
Transmission Line 146L Rebuild	1. Address Existing Deficiencies and Defer Rebuild 2. Rebuild in a Parallel Right-of-Way	1. $13,830,000 2. $12,615,000 A sensitivity analysis confirmed that Alternative 2 remains least-cost after advancing or deferring the replacement of the remainder of the line in Alternative 1.
Application Enhancements – Digital Forms Portfolio Enhancement	1. Status quo 2. Efficiency improvements from completing electronic forms in the field	7-year NPV of $19,872
Application Enhancements - Workforce Management System Enhancement	1. Status quo 2. Efficiency improvements from reduced manual efforts for dispatching and monitoring work requests	7-year NPV of $18,582
Application Enhancements – Daily Time Entry Application Enhancement	1. Status quo 2. Efficiency improvements from reduced manual data entry	7-year NPV of $147,020
Application Enhancements – IT Service Management System Enhancement	1. Status quo 2. Efficiency improvements from reduced manual review of licenses and usage	7-year NPV of $50,775