Q. (Reference Application) Please provide all documentation between Newfoundland Power senior management and line managers with respect to the 2023 CBA relating to prioritization and cost efficiencies by Newfoundland Power.

A. The documentation relied upon by Newfoundland Power to prioritize the capital projects for 2023, including those based primarily on cost efficiencies, is contained within the Company's 2023 Capital Budget Application.¹

Newfoundland Power balances the cost and reliability of its service delivery through a comprehensive capital planning process and a focus on the overall costs borne by customers through customer rates.² It is a collaboration between managers, as well as senior management, to determine the nature, scope and timing of capital projects included in its annual capital budget and which projects can be deferred. This process employs practices to ensure capital projects are consistent with the delivery of reliable service to customers at the lowest possible cost.³

Certain capital projects are prioritized through the Company's capital planning process to reduce overall costs to customers, such as:

- (i) LED Street Lighting Replacement project. This project involves the replacement of existing High Pressure Sodium ("HPS") street light fixtures with Light Emitting Diode ("LED") fixtures. LED fixtures require 60% less energy to provide equivalent lighting output and require less maintenance. Current customer rates for LED street lights are between 12% and 44% lower than rates for HPS street lights.⁴
- (ii) Electric Vehicle Charging Network project. This project involves the installation of publicly available fast charging infrastructure for electric vehicles and is part of a portfolio of customer electrification initiatives that seeks to accelerate electric vehicle adoption in the province. These electrification initiatives are currently estimated to provide a rate mitigating benefit for customers of approximately 0.9 cents/kWh by 2034.⁵
- (iii) Mobile Hydro Plant Refurbishment project. This project involves the refurbishment of the Mobile hydroelectric plant (the "Mobile Plant" or the "Plant"). A comprehensive lifecycle analysis of the Mobile Plant was

¹ For a discussion of Newfoundland Power's prioritization methodology, see the *2023 Capital Budget Application*, *2023 Capital Budget Overview*, *Appendix C*. See also, the responses to Requests for Information PUB-NP-003 and CA-NP-038.

² For a fulsome discussion on how Newfoundland Power balances cost and service reliability, see the *2023 Capital Budget Application*, *2023 Capital Budget Overview*, *Section 2.3 Balancing Cost and Service*.

³ In some instances, the Company's ability to reduce its capital costs is practically limited. For example, approximately one quarter of capital expenditures included in the *2023 Capital Budget Application* are associated with requirements to connect new customers and respond to system load growth. These expenditures are required as part of Newfoundland Power's obligation to serve.

⁴ See the response to Request for Information PUB-NP-007.

⁵ See the response to Request for Information PUB-NP-011.

completed for this project. The analysis showed the Plant's production provides a net benefit for customers between 5.14 ϕ kWh and 6.79 ϕ kWh. The cost of replacement production would need to be reduced by between 66% and 72% to be less than the cost of operating the Plant.

- (iv) Sandy Brook Hydro Plant Generator Refurbishment project. This project involves refurbishing the generator at the Sandy Brook hydroelectric plant (the "Sandy Brook Plant" or the "Plant"), located on a tributary of the Exploits River. An economic analysis of the Sandy Brook Plant completed in 2021 as part of the penstock replacement showed that the benefits of the Plant's production exceed the cost of production. An updated economic analysis was completed in 2022 which confirmed the net benefit of Plant production is still between 2.58 ¢/kWh and 4.61 ¢/kWh based on the most recent changes in marginal costs.⁷
- (v) Application Enhancements project. This project includes the enhancement or replacement of five software applications in 2023 to reduce costs to customers or improve customer service delivery. Combined, the Digital Forms Portfolio Enhancement, Virtual Meeting System Replacement, and Environment, Health and Safety System Replacement will provide a positive net present value for customers of approximately \$283,000. The GIS Enhancement will eliminate annual subscription fees of \$35,000.8

Newfoundland Power also uses a variety of measures through its capital planning process to ensure proposed capital expenditures are consistent with the least-cost delivery of reliable service to customers. These include:

- (i) An assessment of alternatives is completed for capital projects. The 2023 Capital Budget Application includes assessments of alternatives for 19 projects and programs. As an example, three alternatives were explored for the Transmission Line 55L Rebuild project. A net present value analysis determined that rebuilding Transmission Line 55L in a new right of way is the lowest cost of the viable alternatives. 10
- (ii) Capital projects are deferred when possible. Five projects that were planned for 2023 have been deferred to subsequent years. For example, the *Kenmount Road Building Emergency Diesel and Main Electrical Upgrade* project was deferred to allow further analysis to confirm the least-cost approach.

See the 2023 Capital Budget Application, Schedule B, page 116. See also, the 2023 Capital Budget Application, report 4.2 Mobile Hydro Plant Refurbishment, Appendix A: Lifecycle Cost Analysis of the Mobile Plant.

See the 2023 Capital Budget Application, Schedule B, page 120. See also, the 2023 Capital Budget Application, report 4.1 Sandy Brook Hydro Plant Generator Refurbishment, page 8.

⁸ See the 2023 Capital Budget Application, Schedule B, page 137.

See the *Assessment of Alternatives* section for the relevant capital projects and programs in *Schedule B* to the *2023 Capital Budget Application*.

See the 2023 Capital Budget Application, Schedule B, page 106. See also, the 2023 Capital Budget Application, report 3.1 Transmission Line Rebuild, page 7.

See the 2023 Capital Budget Application, 2023 Capital Budget Overview, Appendix B.

- (iii) Capital expenditures are targeted in the areas that provide the most benefits for customers. For example, the Company's 2023 Distribution Reliability Initiative includes targeting the replacement of 6.5 kilometres of deteriorated conductor where customers experience among the worst service reliability in Newfoundland Power's service territory.
- (iv) Capital projects are coordinated, where possible, to realize productivity gains and other cost benefits. For example, the *Sandy Brook Hydro Plant Generator Refurbishment* project is proposed to be coordinated with the replacement of the plant's penstock in 2023. This reduces requirements for plant downtime and the need to purchase more expensive replacement production from Newfoundland and Labrador Hydro. If this project were to be deferred to 2024, the cost of replacing the plant's lost production would be approximately \$200,000.¹²

These examples demonstrate how Newfoundland Power's proposed capital projects are reasonable and necessary to provide reliable service to customers at the lowest possible cost. The Company's cost management associated with its capital expenditures has been previously recognized by the Board.¹³

See the *2023 Capital Budget Application,* report *4.1 Sandy Brook Hydro Plant Generator Refurbishment, Section 5.0 Assessment of Alternatives.*

For example, in Order No. P.U. 36 (2021), the Board stated, "the record shows that Newfoundland Power's capital planning process is comprehensive and includes reasonable controls on capital spending."