Q. (Reference Application Schedule B, Replace Vehicles and Aerial Devices 2022 – 2023, page 71 of 99) It is stated "*This project is justified on the obligation to provide reliable service to customers at least cost and cannot be deferred.*"

a) Please provide evidence based on reliability criteria that Newfoundland Power will be unable to provide reliable service at least cost if it were to delay this project.
b) Please quantify the impact on the following if the project were delayed by two years: 1) reliability, 2) cost, and 3) the risk and consequences of failure.
c) Please indicate when the Replace Vehicles and Aerial Devices project began. What efficiency improvements have been made in the administration of the program and how much have these improvements decreased the costs of the program?

A. a) Newfoundland Power manages its capital expenditures in a manner that balances both the cost and reliability of the service provided to its customers.[1] The Company is focused on maintaining current levels of overall service reliability for its customers at the lowest possible cost.[2] The 2022 *Replace Vehicles and Aerial Devices* project is consistent with this objective.

Newfoundland Power dispatches field crews throughout its service territory to respond to approximately 34,000 customer requests annually, including approximately 11,000 trouble calls.[3] Ensuring a prompt response to customers' requests, including outages, requires an adequate supply of reliable vehicles.

The Company also deploys customer service staff throughout its service territory, including Field Services Representatives, as well as engineers, technologists and other tradespersons responsible for inspecting and maintaining the electrical system. These functions also require an adequate supply of reliable vehicles.

The *Replace Vehicles and Aerial Devices* project is necessary to replace vehicles that have reached the end of their useful service life. The criteria applied for vehicle replacements involves: (i) evaluating which vehicles have reached a certain age or mileage;[4] and (ii) an inspection of those vehicles by a certified mechanic to assess whether they can be economically maintained for additional service.

For 2022, the *Replace Vehicles and Aerial Devices* project includes the replacement of 50 vehicles that have reached the criteria for evaluation and are not expected to be economically maintained.

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1 See response to Request for Information NLH-NP-042.
2 See response to Request for Information CA-NP-014.
3 Trouble calls include calls regarding no service or partial service, and other emergency and safety-related issues.
4 Passenger vehicles are evaluated when they reach 5 years of age or 150,000 kilometres, light-duty and heavy-duty vehicles are evaluated when they reach 10 years of age or 250,000 kilometres. See response to Request for Information NLH-NP-004 for additional information.

Ensuring an adequate supply of reliable vehicles through the *Replace Vehicles and Aerial* devices project is consistent with maintaining current levels of service reliability for customers at the lowest possible cost, as further described in part b).

b) Delaying the 2022 *Replace Vehicles and Aerial Devices* project by 2 years would increase the risk that Newfoundland Power would not have an adequate supply of vehicles to respond to customer outages and other required field work. This is because the Company would be required to either: (i) reduce its number of vehicles; and/or (ii) invest in additional maintenance for vehicles that are past their useful service life. The primary consequences of this approach would be reduced service reliability for customers and increased costs.[5]

Reducing the number of vehicles would reduce the Company's responsiveness to customer outages and other field requests. This, in turn, would reduce service reliability for customers.

Investing in additional maintenance for vehicles that are past their useful service life would increase overall costs to customers. In cases where vehicles are replaced, major component failures are often noted. For example, vehicles can experience major engine failure. Major engine failure can cost between $30,000 to $40,000 to repair for a heavy-duty vehicle. That repair may not ultimately extend the service life of a vehicle due to heavy rust and other deficiencies. Replacement would still be required over the near term, thereby increasing overall costs to customers.

Delaying the 2022 *Replace Vehicles and Aerial Devices* project would therefore be inconsistent with maintaining reliable service for customers at the lowest possible cost.

c) Capital expenditures associated with the purchase and replacement of vehicles and aerial devices have always been a component of Newfoundland Power's annual capital budgets.

Efficiency improvements have been made in the administration of the Company's transportation fleet over time. For example, in 1997 the Company replaced its in-house Transportation Resource Management System and partnered with BML Fleet Management for its passenger vehicle fleet. The fleet management service provided by BML consolidated fuel and maintenance invoicing into a single monthly billing per passenger vehicle. Capturing repairs electronically enabled the Company to better manage its fleet by identifying trends in maintenance by vehicle manufacturer and model. In 2018, the Company moved its light-duty and heavy-duty fleet vehicles into the Element Fleet Management program.[6]

[5] For information on Newfoundland Power's approach to quantifying risks and benefits, see response to Request for Information CA-NP-014.

[6] Element Fleet Management is the current business name of the former BML Fleet Management.

In 2021, Newfoundland Power is implementing a new digital forms solution that will be used by field crews in completing daily inspection and Record of Duty forms. This will provide efficiencies for field crews when completing these forms.[7]

Additionally, the aerial devices used today are capable of completing line work with 2-person crews, as opposed to larger crews that were necessary with earlier devices.[8]

[7] See the *2021 Capital Budget Application, Volume 2, Report 6.1 2021 Application Enhancements*, page 4, *et. seq.*

[8] The new heavy-duty fleet specification allows for use of the aerial device in locations where the conditions at the base of the pole would have required the work to be completed by climbing the pole. Efficiency improvements result because work can be completed within less time and more safely.