Q. (Reference Application Schedule B, page 39 of 98) For the Street Lighting – LED Replacement Program (Pooled) project, it is stated "*This project is justified on the obligation to provide reliable service to customers at least cost and cannot be deferred*."

a) Is it true that this project cannot be deferred? Please explain the impact on customers if this project were delayed by a year.

b) Are there other projects that would likewise be consistent with providing reliable power at least cost such as replacement of household/commercial lighting with LEDs and replacement of residential/commercial electric resistance heating with high efficiency heat pumps?

A. a) As a public utility in the Province of Newfoundland and Labrador, Newfoundland Power is required to provide service to customers in accordance with the provisions of the *Electrical Power Control Act, 1994 (the "EPCA")*.

Section 3 of the EPCA states:

> *"(b) all sources and facilities for the production, transmission and distribution of power in the province shall be managed and operated in a manner…*
>
> *(iii) that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service."*

Evidence filed in the Application shows that the *LED Street Lighting Replacement Plan* will result in both lower overall costs and improved service reliability for Street and Area Lighting customers.[1] Accordingly, deferring the *LED Street Lighting Replacement Plan* would not be consistent with the EPCA.

The *LED Street Lighting Replacement Plan* proposes to replace approximately 10,000 High Pressure Sodium ("HPS") street lights with LED street lights in 2021.[2] This compares to the Company's current practice which would result in approximately 1,700 HPS street lights being replaced in 2021. Once a HPS street light is replaced with an LED street light, the customer begins to pay the lower LED rate.[3] Furthermore, street light outages are less likely to occur once an HPS street light is replaced with an LED street light.

Delaying the *LED Street Lighting Replacement Plan* by a year would result in customers paying higher Street and Area Lighting rates associated with

[1] See the *2021 Capital Budget Application, Volume 1, LED Street Lighting Replacement Plan* at pages 3-4 and pages 7-12.

[2] See the *2021 Capital Budget Application, Volume 1, LED Street Lighting Replacement Plan*, page 8, Table 3 – Comparison of Alternatives: Street Light Installations.

[3] Customer rates for LED street lights are between 9% and 39% less than equivalent HPS rates depending on the lighting output required. See the *2021 Capital Budget Application, Volume 1, Street Lighting Replacement Plan*, page 3, Table 1: Street Lighting Rates (October 1, 2019).

approximately 8,300 HPS street lights in 2021. It would also lead to increased street light outages since HPS street lights would remain in service over a 7-year period as opposed to the proposed 6-year period.

b) Projects or initiatives that involve customer adoption of energy efficient equipment are typically delivered to customers through Newfoundland Power's conservation and demand management programming and not the Company's capital budget applications. Since 2009, through the takeCHARGE brand, Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro") have provided customers with information and programs to help them manage their energy usage.[4]

For residential customers takeCHARGE initiatives include information and financial supports for energy efficient products such as LED light bulbs, thermostats, insulation, HRV systems, dimmer switches, dehumidifiers, etc. Customers are also provided with relevant information and financing opportunities to assist in purchasing heat pumps and other energy savings upgrades.

For commercial customers, takeCHARGE provides the Business Efficiency Program (the "BEP"). The BEP program includes three components: (i) prescriptive rebates; (ii) custom energy rebates; and (iii) custom demand rebates. Prescriptive rebates provide financial benefits when customers purchase and install eligible energy efficient products. Custom energy and demand rebates involve takeCHARGE consulting with the customer on an energy or demand saving project that is customized to individual customer circumstances. Incentives are provided on an individualized basis for projects that are cost-effective from both the customer and utility perspective.

As part of takeCHARGE program planning and monitoring, Newfoundland Power performs economic and energy savings evaluations of its programs. This is to ensure they are consistent with the Company's obligation to provide reliable service to customers at least cost.[5]

[4] See http://www.takeCHARGEnl.ca for details regarding takeCHARGE initiative.

[5] Newfoundland Power's methodology for evaluating customer conservation programming was approved by the Board in Order No. P.U. 18 (2016).