

- 1 **Q. (Reference CA-NP-016g)**
 2 **With respect to LED Street Lighting Replacement project, it is stated "The**
 3 **purpose of the Plan is to accelerate the installation of LED street lights so that**
 4 **customers realize the full economic benefit of the LED street lighting service**
 5 **option."**
 6 **a) Please confirm that NP is replacing street lights before the end of their**
 7 **useful life in order to achieve the full economic benefit of the program.**
 8 **b) What percentage of street lights replaced in each year of the plan have**
 9 **been replaced before the end of their useful life?**
 10 **c) When NP identifies a project with economic benefits does it typically**
 11 **accelerate implementation so that customers realize the full benefit?**
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 13 A. a) It is confirmed. Newfoundland Power is replacing HPS street lights with LED street
 14 lights before the end of their useful service life. This is to ensure customers realize
 15 the full economic benefit of LED street lights sooner than they otherwise would.
 16
 17 b) Newfoundland Power does not track the number of HPS street lights replaced in
 18 each year of the plan that have not reached the end of their useful service life. The
 19 Company estimates that approximately 83% of the HPS street lights replaced in the
 20 first year of the *LED Street Lighting Replacement Plan* were replaced before the end
 21 of their useful service life.¹
 22
 23 c) Projects proposed by Newfoundland Power undergo the development of feasible
 24 alternatives that include consideration of whether a project can be and should be
 25 accelerated to the benefit of customers. An economic analysis is completed for the
 26 considered alternatives to determine the least cost alternative for customers. In the
 27 case of Newfoundland Power's *LED Street Lighting Replacement Plan*, it was
 28 determined that the accelerated replacement of HPS street lights with LED street
 29 lights was in the best interest of customers.²

¹ *The LED Street Lighting Replacement Plan, June 2020* was filed in Newfoundland Power's *2021 Capital Budget Application, Volume 1*. Prior to the plan, each year Newfoundland Power was replacing approximately 1,700 HPS street lights that had reached the end of their useful service life and could no longer be maintained. The LED Street Lighting Replacement Plan includes installation of approximately 10,000 LED street lights each year for a six-year period. The first year of the program would have included approximately 1,700 HPS street lights that had reached the end of their useful service life and approximately 8,300 HPS street lights that had not reached the end of their useful service life ($8,300 / 10,000 \times 100\% = 83\%$).

² See Order No. P.U. 36 (2021) Reasons for Decision, page 28, lines 17-20. The Board found that the proposed expenditures for the LED street lighting replacement program were appropriate and necessary to ensure the delivery of power to customers at the lowest possible cost consistent with reliable service.