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29 30 31 Q. (Reference CA-NP-055)

Regarding the LED Street Lighting Replacement project, assume as planned (Schedule B, page 2) that approximately 10,000 street light fixtures will be replaced with LED fixtures in 2025.

- a) Once all 10,000 are installed, what would be the annual net reduction in energy use as a result?
- b) What would be the annual cost savings to NP's streetlighting customers in 2026 due to that reduction in energy use?
- c) What would be the annual impact on NP's earnings in 2026 due to that reduction in energy use?
- d) What would be the impact on Hydro's 2026 revenues due to that reduction in energy use?
- a) The annual net reduction in energy use as a result of the replacement of 10,000 HPS street lights with LED street lights is approximately 2.8 GWh.<sup>1</sup>
- b) Newfoundland Power's street and area lighting customers pay a monthly rate which includes all costs associated with the provision of street and area lighting service. This includes the cost of energy as well as operating and maintenance costs, depreciation and financing costs. Replacement of 10,000 HPS street lights with LED street lights will save customers an estimated \$0.4 million in annual street light charges.<sup>2</sup>
- c) The impact of the replacement of 10,000 HPS street lights with LED street lights on the Company's energy supply requirements was included in the energy forecast that formed part of Newfoundland Power's 2025/2026 General Rate Application.<sup>3</sup> The lower energy supply costs associated with the LED Street Lighting Replacement Plan are included in the energy supply costs that will be reflected in Newfoundland Power's customer rates in 2026. As a result, lower energy requirements attributable to the replacement of 10,000 HPS street lights with LED street lights will not impact Newfoundland Power's 2026 earnings.<sup>4</sup>

The replacement of approximately 10,000 HPS street lights with LED street lights represents approximately a sixth of the total *LED Street Lighting Replacement Plan*. It is estimated that completion of the plan in 2026 will result in an annual reduction in energy requirements of approximately 16.8 GWh (16.8 GWh / 6 = 2.8 GWh). See Newfoundland Power's *2021 Capital Budget Application, Volume 1, LED Street Lighting Replacement Plan, June 2020, Appendix B*, page B-1.

Based on Newfoundland Power's *Schedule of Rates, Rules and Regulations,* effective August 1, 2024.

See Newfoundland Power's 2025/2026 General Rate Application, Section 5, Customer Rates, page 5-5, lines 9-12. In the June 4, 2024, Settlement Agreement associated with Newfoundland Power's 2025/2026 General Rate Application, the parties agreed that the Board should approve Newfoundland Power's Customer, Energy and Demand forecast.

The lower energy supply costs associated with the *LED Street Lighting Replacement Plan* were also included in the energy forecast that formed the basis of Newfoundland Power's *2022/2023 General Rate Application*. See Newfoundland Power's *2022/2023 General Rate Application*, Section 5, Customer Rates, page 5-5, lines 5-8. See Order No. P.U. 3 (2022) Amended No. 2.

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d) Newfoundland Power purchases the majority of its electricity supply from Hydro in accordance with Hydro's Utility Rate.<sup>5</sup> Hydro's 2026 revenues are subject to a number of factors. These include: (i) Hydro's proposed changes to its Utility Rate to Newfoundland Power to better reflect its marginal energy costs;<sup>6</sup> (ii) Hydro's next General Rate Application which is expected to be filed in the second half of 2025;<sup>7</sup> and (iii) Newfoundland Power's overall 2026 energy sales.

Hydro's proposed changes to the Utility Rate are designed to reflect Hydro's marginal cost of energy which is the opportunity cost of Hydro's market exports. A decrease in energy revenue from Newfoundland Power to Hydro on account of lower energy requirements associated with LED street lights will be recovered by Hydro through additional energy export revenue. As a result, Hydro's 2026 energy revenues should not be affected by lower energy sales attributable to the replacement of HPS street lights with more efficient LED street lights.

Approximately 93% of Newfoundland Power's electricity supply is purchased from Hydro. The remaining 7% is supplied by Newfoundland Power's own generating facilities.

See Hydro's *Application for Adjustment to Wholesale Utility Rate – Revision 1,* filed with the Board on September 25, 2024. Hydro's application is consistent with the June 12, 2024, Wholesale Rate Settlement Agreement between Newfoundland Power, Hydro, and the Consumer Advocate. The Wholesale Rate Settlement Agreement was filed as Information Item #2 in Newfoundland Power's 2025/2026 General Rate Application.

<sup>&</sup>lt;sup>7</sup> See Hydro's letter *Re: Quarterly Update – Items Impacting the Delay of Hydro's Next General Rate Application*, dated September 26, 2024.