

- 1 Q. **Reference: Application, Replace Light- and Heavy-Duty Vehicles (2025-2027)**
- 2 a) How many vehicles will be replaced with electric vehicles (EVs)?
- 3 b) How many EVs does Hydro currently own?
- 4 c) What are the prospects for electric heavy-duty vehicles?
- 5 d) How do the lifetime costs of Hydro-owned EVs compare to Hydro-owned gasoline/diesel
- 6 powered vehicles?
- 7 e) What is the current lead time for purchasing gasoline/diesel light-duty vehicles relative
- 8 to purchasing comparable EVs?
- 9 f) What is the current capital cost of a gasoline/diesel light-duty vehicle and a comparable
- 10 EV?
- 11 g) How do current supply chain issues and high levels of inflation impact the purchase of
- 12 light duty electric vehicles relative to gasoline/diesel vehicles?
- 13 h) It is stated (page 5) *“Substantial cost escalation has been experienced in both the light-*
- 14 *and heavy-duty segments since 2020.”* Does this suggest that historical costs are not a
- 15 particularly good measure of costs going forward? What cost escalation does Hydro
- 16 expect going forward?
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- 19 A. a) Newfoundland and Labrador Hydro (“Hydro”) has a minimum target of acquiring three
- 20 Electric Vehicles (“EVs”) for the light-duty fleet in 2025. The actual number of viable
- 21 opportunities for EVs may be higher and will ultimately be determined using the latest
- 22 available fleet information when light-duty tenders are prepared in the first quarter of 2025.
- 23 b) At year-end 2024, Hydro expects to have 10 fleet EVs in service.¹

¹ Hydro originally expected to have 11 EVs in service; however, 1 unit was deemed non-economic to repair following an accident in 2024.

- 1 **c)** Hydro understands that some Canadian utilities plan to integrate heavy-duty EVs into their
2 fleets in 2024 for use in large urban areas where range requirements are short, which allows
3 for effective deployment. Vendors have yet to offer units with a suitable range for a utility
4 such as Hydro with more rural and remote operations. Based on this information, Hydro
5 does not expect to purchase any heavy-duty EVs in the near- to medium-term. Hydro will
6 continue to monitor the heavy-duty EV market and utility best practices from other
7 jurisdictions.
- 8 **d)** Using the same fleet replacement criteria for EVs and internal combustion vehicles and
9 recent tender pricing, current analyses predict a lifecycle savings of approximately \$21,000
10 with the use of light-duty EV trucks, and approximately \$19,000 with the use of EV sport
11 utility vehicles.²
- 12 **e)** In 2024, Hydro's EV orders indicated similar lead-times as internal combustion vehicles.
- 13 **f)** Based upon recent tenders for comparable all-wheel drive sport utility vehicles, the EV
14 alternative has a purchase price which is approximately \$5,000 higher than an equivalent
15 internal combustion vehicle.³ Hydro expects to recoup this differential in under two years of
16 EV operation, through lower fuel and maintenance costs. Over an expected seven year
17 useful service life, EVs are forecast to result in material savings on a net present value basis.
- 18 **g)** Please refer to part h) of this response.
- 19 **h)** Local light-duty vehicle vendors are unable to predict next year's manufacturer pricing;
20 however, they believe the COVID-19 pandemic shock market-tightening since 2020 has now
21 fully unwound and price stability should return.

22 In the heavy-duty segment, supply chain pressures appear to have abated very little. Light-
23 duty consumers could purchase fewer vehicles to relieve market pressure; however, this
24 was not the case for commercial vehicle buyers, including utilities, who typically replace
25 equipment to mitigate serious operational impacts. As a result, Hydro has budgeted in 2025

² Analyses use recent tender pricing for equivalent EV and gas-powered fleet vehicles, fuel savings based on average annual light-duty fleet mileage of 26,000 km's, and a 32% reduction in maintenance costs for EVs compared to historical costs for gas-powered fleet vehicles.

³ Net of rebates.

- 1 for ongoing price escalation of approximately 10% and expects a continued lead time of at
- 2 least one year longer than pre-pandemic orders.