

- 1 **Q. (Reference Application Schedule B, Replace Vehicles and Aerial Devices 2023-**  
 2 **2024, page 182)**  
 3  
 4 **a) What is the average cost of a replacement vehicle? Please break the cost**  
 5 **down by vehicle type.**  
 6 **b) To what extent have supply chain issues and inflation impacted vehicle**  
 7 **availability and cost?**  
 8 **c) How many vehicles will be replaced with electric vehicles (EVs)?**  
 9 **d) What are the prospects for electric heavy-duty vehicles?**  
 10 **e) To what extent have supply chain issues and inflation impacted vehicle**  
 11 **availability and cost?**  
 12 **f) How do the lifetime costs of NP-owned EVs compare to NP-owned**  
 13 **gasoline/diesel powered vehicles?**  
 14 **g) How many EVs does Newfoundland Power currently have in its fleet?**  
 15 **h) Does the purchase of gasoline/diesel vehicles set back Newfoundland**  
 16 **Power’s electrification program and represent a lost opportunity?**  
 17 **i) Is the risk of stranding gasoline/diesel vehicles increasing?**  
 18  
 19 **A. a) Table 1 provides the average cost of a replacement vehicle broken down by**  
 20 **vehicle type.**

| Table 1<br>Average Cost of Replacement Vehicle<br>(\$2023) |           |
|--|-----------|
| Vehicle Type   | Budget    |
| Heavy Duty   | \$475,000 |
| Medium Duty  | \$400,000 |
| Light Duty   | \$200,000 |
| Passenger  | \$41,000  |

- 21 b) Supply chain issues and inflation have impacted vehicle availability and cost in  
 22 2022. All vehicles, from passenger vehicles to heavy fleet, have increased  
 23 production times and increased cost. Worldwide factory shutdowns during the  
 24 COVID-19 pandemic resulted in a reduced supply of semiconductor chips, which  
 25 affected the production of all types of automotive manufacturing. As a result of  
 26 reduced supply, manufacturers reduced fleet incentives by as much as two-thirds  
 27 compared to pre-pandemic levels. Manufacturers have also reduced the  
 28 production of base model vehicles in favour of higher end vehicles, leading to  
 29 higher prices for available models.

- 1 c) Newfoundland Power currently has a limited number of electric vehicles (“EVs”)  
2 in its fleet. The Company is gaining experience with EVs and monitoring trends  
3 in the EV market, including trends in vehicle prices and model availability.  
4

5 In 2023, the procurement of passenger vehicles will request vendor quotes for  
6 gasoline/diesel powered vehicles and electric or hybrid equivalents. A vehicle  
7 requiring replacement may be replaced with a hybrid or EV model if it is  
8 determined to be least cost for customers. The number of vehicles to be  
9 replaced with electric or hybrid equivalents in 2023 will not be determined until  
10 inspections are completed to identify the specific vehicles that require  
11 replacement and quotes are received and evaluated from vendors. Accordingly,  
12 a specific quantify of vehicles to be replaced with electric or hybrid equivalents  
13 cannot be identified at this time.  
14

- 15 d) Electric heavy duty vehicles are currently under development by manufacturers,  
16 with more cab and chassis models becoming available. One concern with current  
17 models is the lack of range compared with a diesel engine. The first step toward  
18 a broad deployment of electric heavy-duty vehicles after they become readily  
19 available in the marketplace would be to evaluate the use of one of these  
20 vehicles in meeting Newfoundland Power’s operational requirements, including  
21 requirement to respond to customers in all weather conditions.  
22

23 In 2023, Newfoundland Power plans to purchase a medium-duty vehicle with an  
24 electric power take-off, which allows the aerial device to be operated while the  
25 diesel engine is off. The electric power take-off will reduce the environmental  
26 impact of this vehicle, as there is a considerable amount of time during the  
27 workday when this type of vehicle would be idling in order to use the aerial  
28 device.  
29

- 30 e) See the response to part b).  
31

- 32 f) Newfoundland Power is gaining experience in understanding the lifetime costs of  
33 Company owned EVs compare to gasoline/diesel powered vehicles. To date, the  
34 Company’s experience is limited as its EV fleet is currently composed of four  
35 small SUVs. The vast majority of the Company’s passenger fleet are pickup  
36 trucks and vans, including four-wheel drive models. Equivalent EVs for these  
37 larger passenger vehicles are only now coming to market. Broader experience  
38 with EVs that are equivalent to the larger gas/diesel powered vehicles currently  
39 comprising the passenger fleet is needed to compare the lifetime costs of EVs  
40 with gasoline/diesel powered vehicles.  
41

- 42 g) Newfoundland Power currently has four EVs in its fleet with an additional electric  
43 pickup truck scheduled for delivery later in 2022. The existing four EVs are small  
44 SUVs.  
45

- 46 h) No, the purchase of gasoline/diesel vehicles does not set back Newfoundland  
47 Power’s electrification program or represent a lost opportunity. As discussed in

1 this response, Newfoundland Power is gaining experience with EVs in its  
2 operations and monitoring trends in the EV market. Decisions on whether to  
3 purchase an EV will depend on what is assessed to be the least-cost alternative  
4 to meet Newfoundland Power's operational requirements.  
5

- 6 i) The risk of stranding gasoline/diesel vehicles remains low. On April 22, 2022,  
7 the Federal Government announced a future sales mandate for zero-emission  
8 vehicles so that 100% of new light-duty vehicles sold in Canada will be zero  
9 emission by 2035.

10  
11 All gasoline/diesel powered vehicles identified for replacement in 2023 will be  
12 fully depreciated before the 2035 timeframe. Further, the sales mandate is for  
13 new vehicles only and there is no restriction on continued operation of  
14 gasoline/diesel powered vehicles past 2035. As such, it is expected that fueling  
15 and maintenance will continue to be available for gasoline/diesel powered  
16 vehicles beyond 2035.