

1 **Q. Reference: Project 15: Replace Heavy-Duty Mobile Equipment (2027–2028) Table 1, page 10**

2 **(a)** Provide all of the assumptions and data used by Hydro to calculate the NPV of the
3 Existing Process (Rental) alternative.

4 **(b)** How many years are included in the NPV analysis?

7 **A. a)** To evaluate the Net Present Value (“NPV”) of the Existing Process alternative,
8 Newfoundland and Labrador Hydro (“Hydro”) made the following assumptions:

9 i. Purchase

- 10 • Purchase price of new telehandler is approximately \$200,000.¹
- 11 • Operation and maintenance costs are approximately \$1,000/year.²
- 12 • Escalation applied to purchase price and yearly operation and maintenance cost
13 of new telehandler.
- 14 • Fuel cost is approximately \$1,800/year.³

16 ii. Rental

- 17 • Rental cost is based on:⁴
 - 18 ○ \$8,600/month x six months per year.⁵
 - 19 ○ \$7,500 for winter snow clearing, per year.⁶
 - 20 ○ \$1,000 per mobilization and demobilization of rental, twice per year.
 - 21 ○ Monthly rental rate increasing by \$100 every five years.⁷
- 22 • Fuel cost is approximately \$1,800/year.⁸

¹ Includes a bucket, forks, and snowblower.

² Accounts for one full service per year, including oil change and filter.

³ 75L per fill, \$2.00/L, 12 fills/year, with no escalation applied to fuel cost.

⁴ No operation and maintenance costs are included, as it is the responsibility of the rental company.

⁵ Average based on actual costs incurred since November 2021.

⁶ The telehandler is used as needed, in addition to snow clearing contracts, for access to equipment in tight areas where plows cannot reach. Cost varies by year; this is a conservative approximation.

⁷ No further escalation applied.

⁸ 75L per fill, \$2.00/L, 12 fills/year, with no escalation applied to fuel cost.

- 1 **b)** A study period of 22 years was used for the NPV analysis, as this is the expected service life
2 of a telehandler as per Hydro's asset depreciation studies. Therefore, no benefit was
3 calculated for the new telehandler at the end of the study period under the assumption
4 that it has reached the end of its service life.