

1 Q. Reference: 2021 Capital Budget Supplemental Application Approval of the Construction of
2 Hydro’s Long-term Supply Plan for Southern Labrador – Revision 1 – Safe and Reliable Power
3 Supply to Charlottetown – Reply, Attachment 2, Summary of Technical Note RP-TN-089,
4 page 7 of 25, Table 6 and the response to Request for Information
5 PUB-NLH-045, Table 1.

Table 6: Capital Costs of Diesel Plant Construction (\$000)³

	Regional	CHT	MSH	PHS	SLE
Total Costs	49,010	40,384	37,413	37,296	36,546

6 Hydro’s Alternative 2 includes the cost to construct a new Charlottetown diesel generating
7 station which was destroyed by fire and new individual diesel generating stations in each of the
8 other communities over the period 2030 to 2045 at an estimated capital cost of between \$36
9 million to \$40 million. In the response to Request for Information PUB-NLH-045, Hydro lists all
10 of its 23 diesel generating stations ranging in age from 15 years (St. Lewis) to 69 years (North
11 Plant).

12 a) Given that Alternative 2 involves the construction of new diesel generating stations for
13 Mary’s Harbour, Port Hope Simpson, and St. Lewis over the 2030 to 2045 period, and
14 also given that the St. Lewis diesel generating station is Hydro’s newest, does Hydro
15 expect that it will be constructing new diesel generating stations to replace each of its
16 other 19 diesel stations over the same 2030 to 2045 time frame? If not, why not?

17 b) The response to Request for Information PUB-NLH-045 identifies 11 isolated diesel
18 generating stations that are 40 years or older which is beyond the planned retirement
19 age of the Mary’s Harbour, Port Hope Simpson, and St. Lewis diesel generating stations.
20 Does Hydro anticipate replacing its 11 isolated diesel generating stations that have
21 already been in service for over 40 years with new generating stations in the near term?
22 If not, why not?

- 1 A. **a)** Of the 23 diesel generating stations Newfoundland and Labrador Hydro (“Hydro”) operates,
2 there are a wide range of ages and conditions; several diesel generating stations have
3 undergone recent upgrades or expansion. Although some diesel generating stations are
4 nearing or past their expected 40-year lifespan, they are being used in a standby capacity or
5 are located in a community with a declining load and are well-sized for required operation.
6 Hydro has identified two stations outside of southern Labrador (Paradise River and Rigolet)
7 that are nearing the need for a potential replacement, as they are in poor condition and/or
8 no longer suitable to meet the growing load. Hydro is currently assessing options to address
9 the need for replacement of these diesel generating stations. Hydro has not identified any
10 other diesel generating station replacements through 2045; however, Hydro will identify the
11 need for replacement should one arise through its regular inspection and review of assets.
- 12 **b)** Hydro must consider a number of factors when considering diesel generating station
13 replacement, including age, condition, load/diesel generating station sizing, and the specific
14 role of the diesel generating station. Of the 11 isolated diesel generating stations that are
15 40 years or older, there are 3 standby diesel generating stations, which will be maintained
16 as long as they are required; the 2 aforementioned stations for which Hydro is evaluating
17 options (Paradise River and Rigolet) are in deteriorated condition; and the remaining 6
18 stations are properly sized to meet the long-term needs of their community and had or will
19 have significant upgrades to extend the useful life beyond 40 years.