

1 **Q. (Reference NLH-NP-020 and NLH-NP-021, page A-13 of Application) Please**
 2 **calculate the levelized cost of plant production (described as "Levelized Rev Rqmt"**
 3 **in the table on page A-13 of Application) assuming that the plant becomes stranded**
 4 **at the end of 2041 and production ceases thereafter.**

5
 6 A. Table 1 provides the economic evaluation results for the scenario requested where plant
 7 production ceases after 2041. For comparison purposes, Table 1 also includes the
 8 original results provided in Table 3, page A-5 of Appendix A to the report *1.2 Sandy*
 9 *Brook Plant Penstock Replacement*.

Table 1
Economic Evaluation Results
50 Year Analysis and Production Ceases after 2041

	Original 50-Year Analysis		Production Ceases after 2041	
	Levelized Value ¹	Net benefit	Levelized Value ²	Net benefit
Cost of Plant Production	3.22 ¢/kWh		3.95 ¢/kWh	
Benefits of Production (Run of River)				
Value of Energy	5.67 ¢/kWh		4.72 ¢/kWh	
Value of Capacity	<u>4.59 ¢/kWh</u>		<u>3.92 ¢/kWh</u>	
Total	10.26 ¢/kWh	7.04 ¢/kWh	8.64 ¢/kWh	4.69 ¢/kWh
Benefits of Production (Fully Dispatchable)				
Value of Energy	5.67 ¢/kWh		4.72 ¢/kWh	
Value of Capacity	<u>7.76 ¢/kWh</u>		<u>6.96 ¢/kWh</u>	
Total	13.43 ¢/kWh	10.21 ¢/kWh	11.68 ¢/kWh	7.73 ¢/kWh

10 Table 1 shows that the benefits of the Sandy Brook Plant's production under the scenario
 11 where production ceases after the end of 2041 will exceed its cost of production by
 12 between 4.69 and 7.73 ¢/kWh. The large differences between costs and benefits suggest

¹ The original analysis provided in Table 3, page A-5 of Appendix A to the report *1.2 Sandy Brook Plant Penstock Replacement* was based on an in-service date of January 1, 2023.

² The 2023-2041 levelized value is based on an in-service date of November 31, 2023. The cost of plant production does not include the impact of reduced production related to the capital project. If the impact of reduced production related to the capital projects were included in the analysis the levelized cost of production would increase to 4.05 ¢/kWh, or approximately 2.5%.

1 any reasonable variance in the estimates of costs and benefits will continue to support the
2 continued operation of the Sandy Brook Plant.

3

4 A working copy of the Excel document “CA-NP-161, Attachment A.xlsx” used to
5 calculate the levelized cost of plant production, as well as the levelized values of energy
6 and capacity, can be found on Newfoundland Power’s stranded website at:

7 <https://ftp.nfpower.nf.ca/>.