

1 **Q. (Reference Application Schedule B, Sandy Brook Plant Penstock Replacement, page**  
 2 **5 of 99) The estimated levelized cost of electricity at Sandy Brook is given as 3.22 cents**  
 3 **per kWh over a 50-year period. The associated economic analysis in Attachment D to**  
 4 **Appendix A of *Sandy Brook Plant Penstock Replacement* (page A-13) shows that this**  
 5 **levelized cost is estimated over the period 2022 to 2071 with no capital investment in**  
 6 **the facility after 2047. Is it realistic to assume that no such investment would be**  
 7 **required for the 24-year period from 2048 to 2071? If capital investment would be**  
 8 **required after 2047, then how would the levelized cost estimate be affected?**

9  
 10 **A.** The continued operation of Sandy Brook Plant will require some level of capital  
 11 investment after 2047. These capital expenditures were not included in the analysis as  
 12 they are expected to have minimal impact on the lifecycle investment due to the  
 13 discounting of future costs in the present value analysis.

14  
 15 Newfoundland Power reviewed potential capital expenditures for the Sandy Brook Plant  
 16 beyond 2047. All major components that typically require refurbishment are being  
 17 addressed in the initial 25 years of the study period. No major components are expected  
 18 to require refurbishment between 2047 and 2071.

19  
 20 Table 1 lists the capital expenditures that are expected to be required over the period  
 21 2047 to 2071.

**Table 1**  
**Sandy Brook Hydroelectric Plant**  
**Capital Expenditures**  
**(2047 to 2071)**

<b>Year</b>	<b>Expenditure</b>	<b>Description</b>
2061	\$35,000	Replace Batteries and Charger
2061	\$550,000	Rehabilitation of Powerhouse and Crane Replacement
<b>Total</b>	<b>\$585,000</b>	

22 Including these capital expenditures does not materially change the levelized cost of  
 23 production. The levelized cost of production increases by approximately 1% from  
 24 3.22 ¢/kWh to 3.26 ¢/kWh when including these capital expenditures. This demonstrates  
 25 the minimal impact on the lifecycle investment of capital expenditures in later years due  
 26 to the discounting of future costs in the present value analysis.