

1 Q. **Reference: Schedule 1 - Capital Expenditures Necessary to Address Supply in Charlottetown**  
2 **and Pinsent's Arm, Labrador, Page 4.**

3 To mitigate the significant reliability risks associated with mobile generation, the  
4 limited availability of suitable and economical rental units, and the long lead-  
5 time associated with procurement of a new mobile genset, Hydro is proposing  
6 to increase the level of redundancy from N-1 to N-2 in Charlottetown.

7 Assuming Hydro proceeds with the acquisition of the used LCP genset, please describe how  
8 Hydro would address another generator failure in its remote diesel systems. In the response,  
9 please detail any existing mobile generation units that could be utilized as replacement units  
10 during such an occurrence.

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13 A. Newfoundland and Labrador Hydro's ("Hydro") firm capacity criteria states that each diesel  
14 generating station must be capable of serving peak load following the loss of a single diesel  
15 genset (N-1 redundancy). Currently, all Hydro-owned mobile units are in use and required in  
16 specific locations to meet firm capacity. In the event of an emergency or capacity shortage  
17 situation, Hydro could possibly relocate Unit 2090 from Mary's Harbour; however, this could  
18 only occur if the Mary's Harbour fish plant is not in operation (May to October). If Unit 2090  
19 were to be relocated during the winter season, it must be returned to Mary's Harbour prior to  
20 May when the fish plant starts operation. There is also the possibility of relocating a mobile unit  
21 from L'Anse-au-Loup during the summer season; however, this would present voltage  
22 differences and would also have to be returned to L'Anse-au-Loup prior to the winter season  
23 when the system experiences peak load conditions. The most likely and prudent solution in the  
24 event of another mobile failure is to rent a mobile genset from a local supplier, depending on  
25 availability, as this would not disrupt diesel generating station operation in other communities.