

1 Q. Explain the role, if any, that the generating facilities owned by Abitibi  
2 Consolidated and Corner Brook Pulp and Paper play in voltage and  
3 frequency support to the island grid.  
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5 A. The generating facilities owned by Abitibi Consolidated and Corner Brook  
6 Pulp and Paper can be grouped into two categories: 50 Hz generation and  
7 60 Hz generation. The 50 Hz generation of each customer provides voltage  
8 and frequency support to the individual 50 Hz systems owned by each  
9 customer, which is of no benefit to the Island Interconnected System.  
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11 The 60 Hz generation of Abitibi Consolidated in Grand Falls is connected to  
12 the low voltage (6.9 kV) system at the mill and provides voltage support for  
13 mill operation. There is very little impact on voltage levels of the surrounding  
14 230 kV transmission system for adjustments in VAR dispatch of Abitibi  
15 Consolidated owned generation.  
16

17 The 60 Hz generation of Corner Brook Pulp and Paper at Deer Lake provides  
18 voltage support to the 66 kV transmission system owned and operated by the  
19 customer. The typical VAR dispatch at Deer Lake is set to ensure an  
20 adequate stability margin for the plant and acceptable voltage levels of the  
21 customer's 66 kV system. Thus the typical mode of operation provides no  
22 appreciable voltage support to the Island Interconnected System. The VAR  
23 output of the Deer Lake plant can be changed to adjust the voltage level on  
24 Hydro's 66 kV bus at its Deer Lake Terminal Station. However, this is one of  
25 a number of alternatives available to Hydro to control the Island  
26 Interconnected System voltages in the Deer Lake area. Alternatives include  
27 adjustment of the T1 and T2 transformer tap positions at Deer Lake,

1            adjustment of the VAR output at Hinds Lake and adjustment of the VAR  
2            output at Cat Arm.

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4            The generation facilities owned by Abitibi Consolidated and Corner Brook  
5            Pulp and Paper do not play a role in frequency control of the Island  
6            Interconnected System. Plant outputs are not under the control of Hydro's  
7            Energy Control Centre, but rather are dependent upon mill production and  
8            water availability.