

1 Q. **Tab C; Volume I: Projects \$500,000 and Over (Hydraulic Generation In-Service**  
2 **Failures)**

3 Page C-31 identifies three items that are anticipated to be purchased in 2018 under  
4 the Hydraulic Generation In-Service Failures project: Hinds Lake Circuit Breaker, Cat  
5 Arm Excitation Transformer, and Hinds Lake Service Transformer.

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7 Please explain why Hydro anticipates the need to purchase this equipment for  
8 these specific locations in 2018. Please provide any supporting  
9 analysis/documentation.

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12 A. In 2018, the three items will be purchased to ensure more prompt restoration of  
13 generating units if a failure occurs. Each item has a relatively long delivery time and  
14 Hydro has deemed these to be critical spares that are capital in nature (see PUB-  
15 NLH-012).

16 a. If the Hinds Lake Generator Breaker fails, the 75 MW of generating capacity  
17 from the Hinds Lake unit would not be available during the 18 week delivery  
18 time for a replacement breaker.

19 b. If one of the Cat Arm excitation transformers fails, 67 MW of generating  
20 generation capacity would not be available for the 16 week delivery time for  
21 a replacement transformer.

22 c. If the Hinds Lake Station Service Transformer fails, Hydro would be relying  
23 on the emergency diesel generator to supply station service power during  
24 the 15 week delivery time for a new transformer. During this time, the 75  
25 MW capacity of the Hinds Lake Unit would not be reliable and added costs  
26 would be incurred for 24 hour staffing and fuel.