

1 Q. **Reference: *Structural Capacity Assessment of the Labrador Island Transmission Link (LITL)*,**  
2 ***EFLA*, April 28, 2020, page 51.**

3 *“The “Strain Margin” type test [12] indicate that the optical fibres permanent attenuation in*  
4 *signal was below the limits specified in IEEE Std. 1138-2009 when tested up to the RTS.”*

5 Please explain how Hydro would diagnose a failure of the OPGW optical fibres and describe the  
6 work and the duration of the work that would be required to make repairs?

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9 A. It is important to consider that a failure of the optical ground wire (“OPGW”) optical fibers will  
10 not result in a power outage and transmission loss for Labrador-Island Link (“LIL”). The OPGW  
11 fibers are a key component in the primary communication path for the LIL operations. A failure  
12 of the optical fibers will result in communication failure of the primary route and the  
13 requirement for the use of a secondary communication route, which would remain in-service  
14 and ensure continued delivery of power via the LIL until the OPGW was repaired and placed  
15 back in-service.

16 The control system would notify the operator of a telecoms path failure. Repair of the OPGW  
17 would then require stringing of new OPGW conductor on LIL transmission towers between  
18 designated splice box sections.