

1 Q. MHI-Nalcor-07 includes the updated cost estimate for the HVDC. MHI-Nalcor-19  
2 states, "There is no definitive design report as this work was done internally  
3 however document CE 32 (Exhibit 23) HVDC System – Historical Summary outlines  
4 the sequence of events leading to the current project definition". Could a Bill of  
5 Quantities be provided to assess what has and has not been included in MHI-  
6 Nalcor-07?

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9 A. Details of the basis of estimate for the Labrador-Island Link are contained in Exhibit  
10 CE-51 Rev. 1 (Public). For further clarity, the DG2 cost estimate includes provision  
11 for all components, including those for which detailed designed has yet to progress  
12 to the point of Material Take-offs being available.

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14 A Bill of Quantities for the Labrador Island Link is being developed as part of  
15 detailed engineering; a preliminary list of material quantities is shown below. In  
16 addition, to assess what has been included in the capital cost estimate, Section 6 of  
17 Exhibit 30, Lower Churchill Project Design Progression 1998 -2011, provides a listing  
18 of the main equipment, key technical parameters for the main equipment, lengths  
19 of transmission, operating voltages, electrode sites, electrode lines, converter  
20 stations, system upgrades, SOBI marine crossing and transition compounds.

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22 A preliminary list of material requirements is presented below:

- 23 • 2,200,000 m of conductor
- 24 • 345,000 dc insulators
- 25 • 3,640 steel towers and 18,000 foundations (mix of steel grillage and guy  
26 anchors)
- 27 • 1,100,000 m each of OPGW and counterpoise

- 1       •       520,000 m of guy wire
- 2       •       900,000 m of electrode conductor
- 3       •       120,000 m submarine cable
- 4       •       1,000,000 tonnes of rock
- 5
- 6       Electrical equipment and converter stations will be provided as turn key projects.