

1 Q. **Transmission Rate and Methodology**

2 References:

- 3 (i) NLH 2017 GRA, Evidence, chapter 5, page 5.35
- 4 (ii) NLH 2017 GRA, Evidence, chapter 5, page 5.35, footnote 51
- 5 (iii) NLH 2017 GRA, Evidence, chapter 5, page 5.36
- 6 (i) *« Labrador West transmission is nearing its capacity limitations. The cost of*
- 7 *providing new transmission to meet load growth on the Labrador Transmission*
- 8 *System is high and can materially impact future customer rates. »*
- 9 (ii) *« 51 In OC2014-034, Hydro was directed to construct a new 230 kV transmission*
- 10 *line between Churchill Falls and Labrador West; the budget for this line was*
- 11 *approximately \$330 million. The project was suspended in September 2014. »*
- 12 (iv) *« The capital cost of new transmission line facilities servicing Labrador West from*
- 13 *Churchill Falls is projected to be in the range of \$5 to \$6 per kW. »*

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15 What other alternative has NLH explored to manage a capacity constraint on the

16 Labrador Transmission System?

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19 A. Hydro is currently undertaking a Transmission Planning study to assess the system

20 in western Labrador. This study will involve the technical and economic evaluation

21 of alternatives including the construction of new transmission lines or generation,

22 including additions as referenced in Hydro's 2017 GRA, Evidence, Chapter 5. The

23 study will allow for development of a transmission system expansion plan to deliver

24 least-cost reliable power to forecasted loads.

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26 While additions to transmission system infrastructure would be required to meet

27 substantial load growth beyond forecasted values, demand-side management is

28 another method for reducing forecasted load.

1 Conservation and Demand Management (CDM) is an option that, in certain
2 situations, can help delay the requirement for infrastructure upgrades. With
3 respect to the Labrador West electricity system, industrial load accounts for the
4 largest portion of peak system demand. Hydro has been promoting and supporting
5 CDM initiatives with its industrial customers for several years through the
6 takeCHARGE Industrial Energy Efficiency Program (IEEP). In 2010, Hydro fully funded
7 a facility-wide energy audit of IOC; the audit identified nine energy efficiency
8 opportunities at the site. The IEEP also offers financial incentives to help support
9 detailed feasibility studies and implementation of energy efficiency measures. In
10 2015, Hydro shared the cost of a Compressed Air System review at IOC; the report
11 identified a range of opportunities, some of which involved relatively inexpensive
12 operational changes. Hydro has recently had further discussions with IOC on CDM
13 and is willing to work, in partnership, with its customers and expert consultants on
14 a demand management strategy and projects.

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16 While Hydro will continue its efforts to investigate and promote CDM in Labrador,
17 the forecasted rate and magnitude of system load growth over the next several
18 years is expected to exceed the potential of demand reduction initiatives that is
19 considered economically feasible to pursue by Hydro's customers.

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21 Hydro is also proposing a revised transmission rate design for Labrador Industrial
22 Customers to provide a stronger financial incentive for customers to manage peak
23 demand requirements on the Labrador Interconnected System. See Section 5.9 of
24 Hydro's 2017 GRA evidence.