

Island Interconnected System Supply Issues and Power Outages (Phase 2)

1 Q. InterGroup Consultants Ltd. Report, page 15, lines 24-31 and page 16, lines 1-4.
2 Mr. Osler notes that the cost of maintaining Holyrood on a cost per MW basis is
3 similar to Nova Scotia's investment in its thermal units. Please comment on the
4 appropriateness of similar levels of spending for units with different remaining
5 lives and whether this is a factor that needs to be considered.

6 A.

7 Both Hydro and Nova Scotia Power are currently maintaining thermal assets in
8 anticipation of the availability of Muskrat Falls generation and LIL [plus ML for
9 Nova Scotia Power]. Further delays with the in-service date for Muskrat Falls
10 would require further assessment by both utilities and additional expenditures to
11 extend the operational availability of these assets.

12 In the ESRA, Hydro notes that it has maintenance and capital programs to
13 maintain and refurbish/replace systems and components of Holyrood. Hydro also
14 recognizes that "as the plant is aged and near end-of-life, systems and
15 components may fail before problems can be identified and corrected."¹
16 However, for Hydro the challenge is more pronounced as there is neither a
17 readily available alternative generation source nor existing transmission
18 interconnections with adjacent jurisdictions to offset the availability of the
19 Holyrood TGS facility. It is expected that Holyrood can be retired in the early
20 years of operation after Muskrat Falls and LIL are in service - once it is
21 demonstrated that these facilities can be relied upon to replace Holyrood
22 capacity for Hydro's Island customers.

23 Comparatively, most of the Nova Scotia Power thermal units are expected to be
24 in service past 2035². While Nova Scotia Power has existing transmission
25 interconnections with adjacent jurisdictions, these interconnections are subject to
26 limitations regarding how much capacity can be imported through the
27 transmission line. Nova Scotia Power also faces certain challenges regarding the
28 future of these thermal units due to the requirement to reduce greenhouse gas

¹ ESRA page 28.

² Nova Scotia Utility and Review Board, 10 Year System Outlook – 2016 Report, page 27. Extract is provided in Appendix C of Mr. Osler's October 14, 2016 report.

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1 emissions by 25% and increase sources of renewable generation to 40% of
2 electricity requirements by 2020.³

3 By comparing Hydro's level of investment in its thermal units to that of Nova
4 Scotia Power, InterGroup is not suggesting this is the only factor to be
5 considered in determining the appropriate level of investment by Hydro. The
6 projected remaining lives, the current condition of the assets, their criticality to
7 overall system reliability, and other factors must of course also be taken into
8 account. However, it is suggested that the information provided in Mr. Osler's
9 report on Nova Scotia Power thermal unit maintenance costs provides an
10 external benchmark of the spending on Holyrood units by Hydro. Closer scrutiny
11 of these investments might be required if Hydro's level of investment on these
12 assets was projected to significantly exceed Nova Scotia's level of investment.

³ <http://www.nspower.ca/en/home/about-us/how-we-make-electricity/renewable-electricity-emissions-regs.aspx> [accessed on November 21, 2016].