Q. 1 A member of the public, in his submission to the Board dated May 27, 2014 stated, 2 "Since NL Hydro has not used a life-cycle, CPW methodology (where operating and 3 maintenance costs are included) to reach its conclusions and recommendations, then I would submit that NL Hydro has not rationally demonstrated that a 100 MW 4 5 combustion turbine is best suited to meet the island's short term reliability and 6 least-cost needs." 7 Please fully address this submission. 8 9 10 A. Hydro did use a life-cycle, CPW methodology (where operating and maintenance 11 costs are included) to reach its conclusions and recommendations that a 100 MW 12 combustion turbine is best suited to meet the island's short term reliability and 13 least-cost needs. Given that the capital and O&M costs for the proposed 100 MW 14 combustion turbine are similar to that of the 50 MW and 60 MW combustion 15 turbines mentioned above, the following is noted in the Executive Summary (page 2) of the submission, Supply and Install 100 MW (Nominal) of Combustion Turbine 16 17 Generation Holyrood: 18 19 This generation capacity deficit and the least cost long term options to 20 rectify it were analyzed as part of the 2012 Muskrat Falls DG3 evaluation of the Isolated Island and Interconnected Island alternatives. The results of that 21 22 evaluation were presented in the report Review of the Muskrat Falls and 23 Labrador Island HVdc Link and the Isolated Island Options- October 2012-24 Manitoba Hydro International (see attached in Appendix D). 25 26 The analysis indicated that, based on available generation options, the least 27 cost long term option to meet the additional capacity requirement in 2015

100 MW Combustion Turbine Generation - Holyrood

	Page 2 of 2
1	was a 50 MW (nominal) combustion turbine. A recent review of the customer
2	demand forecast and generation availability assumptions confirmed this
3	replacement with a 60 MW (nominal).
4	
5	Section 7.0 Preliminary Generation Expansion Analysis of System Planning's
6	Generation Planning Issues- November 2012 report (see Appendix C of the
7	submission) also notes the use of a life cycle, least cost methodology in carrying out
8	the generation expansion study leading to the recommendation to build a
9	combustion turbine as the next generation source.