

1 Q. **Re 2011 Capital Plan - Individual Capital Projects:**

2 Provide the complete detail of the assumptions and calculations for the CBA and
3 CPWs provided by Hydro at Volume I, Tab 2, pages 14-16, section 4.3 and at Volume
4 I, Tab 9, pages 10-11, section 4.3, and to be provided by Hydro in response to the
5 above requests for information.

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8 A. Regarding Volume 1, Tab 2 (Upgrade Stack Breeching, Unit 1). This proposal will be
9 revised. Please refer to IC-NLH-16 for an explanation.

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11 The following assumptions were made during preparation of the CBA and CPW
12 provided by Hydro in the report filed under Volume 1, Tab 9 (Upgrade Forced Draft
13 Fan Ductwork Unit 1) on pages 14-16 of Section 4.3:

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15 Alternative 1 (Upgrade Unit 1 Fan Ductwork):

16 1. There is an anticipated energy saving of 16 percent per fan based on a
17 commercial proposal titled "FD Fan Inlet & Discharge Ductwork Modification To
18 Eliminate Flow Induced Vibration and Capacity Bottleneck" provided by M&I Power
19 Technology located in Appendix B of the Volume 1, Tab 9 report. The savings were
20 calculated using the January 2010 Nalcor Energy/NLH Thermal Fuel Oil Price
21 Forecast for No.6, 0.7 percent sulphur fuel with a PUB approved conversion factor
22 of 630 kwh/bbl.

23 2. The annual operating and maintenance (O&M) cost is estimated to be \$1,000 per
24 year.

1 Alternative 2 (Status Quo):

2 1. The average O&M cost was estimated to be \$7,000 per year based on the
3 maintenance history.

4 2. A forced outage occurred on Unit 1's East FD fan in 2008 due to a failure of the
5 fan intake guide vanes. The repair cost during this occurrence in 2008 was
6 \$330,000. It was assumed in the CBA that a similar occurrence would occur again in
7 2018 and was included in the O&M cost.

8 3. With reference to the M&I proposal located in Appendix B of the Volume 1, Tab 9
9 report, the CFD analysis (Item #1) was escalated based on an engineering review.