

1 Q. With respect to MF1320, this report indicates firm generation of 515 MWc, not 824
2 MWc at Muskrat Falls. Why?

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5 A. The 515 MWc rating is the MW-continuous rating and is a means of expressing the
6 firm capability based on water availability. The 824 MW value refers to the
7 nameplate capacity rating of the plant, comprised of four units at 206 MW each.
8 (MF1320, as of the date of this response, July 26, 2011, has not been disclosed to
9 the public as it may contain commercially sensitive or confidential information.
10 Some or all of this report may be released at a later date.)

1 Q. The +/- 320 kV was noted as the minimum operating voltage for the HVDC. Please
2 explain the rationale for this decision; have conductor optimization studies been
3 revised to support this; and revised cost estimates transmission lines, cables, and
4 converter station equipment.

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7 A. Please see document HVdc System – Historical Summary – 2011-07-14, filed in
8 response to question #8 included in the Board’s July 12, 2011 letter to Nalcor for
9 the evolution of the current configuration of the HVdc operating voltage (Exhibit
10 23). The CPW inputs for this item are included in the responses to MHI-Nalcor-7
11 and MHI-Nalcor-24.

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13 Further optimization will take place as part of Phase 3 engineering.

1 Q. What assurances exist and what are the cost implications for mainland power
2 sources to supply firm power in the event of a loss of the HVDC system?

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5 A. The HVDC interconnection is designed to obtain the required level of reliability via
6 the HVDC link from Labrador in conjunction with island generation facilities. Any
7 additional reliability benefit as a result of the Maritime link has not been factored
8 into the analysis, and is in addition to the reliability level built into the Labrador link.

- 1 Q. With respect to document DC1010 “Voltage and Conductor Optimization”
- 2 a. How do the costs for the various voltage options at the top of page 3-20 get
- 3 factored into the CPW?
- 4 b. In para 3.2.4 it is stated, “The costs estimates exclude the costs for
- 5 operating and maintaining the transmission system, and also exclude the
- 6 costs for laying and protecting the submarine cables, which will have a
- 7 significant impact on the total project costs.” Please explain the rationale
- 8 (*sic*) and elaborate.
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- 11 A. a. Please see document HVdc System – Historical Summary – 2011-07-14, filed
- 12 in response to question #8 included in the Board’s July 12, 2011 letter to
- 13 Nalcor for the evolution of the current configuration of the HVdc operating
- 14 voltage (Exhibit 23). The CPW inputs for this item are included in the
- 15 responses to MHI-Nalcor-7 and MHI-Nalcor-24.
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- 17 b. The development of the costs for operating and maintaining the
- 18 transmission system and for laying and protecting the submarine cables was
- 19 beyond the scope of DC1010. The applicable estimates were prepared by
- 20 Nalcor and included in the CPW.

1 Q. What costs have been factored in for public consultations on either option?

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4 A. Public consultation for the Muskrat Falls option was included in the Environmental
5 Assessment process, and extensive public consultation has already occurred. While
6 the costs for consultations were not budgeted separately, they are included in the
7 project cost associated with the Interconnection option.

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9 No public consultation costs have been included in the costs for the Isolated island
10 option.

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12 In either case, the costs of public consultations are not considered material.

1 Q. What costs have been factored in for environmental assessments?

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4 A. The HVdc capital cost includes approximately \$12.9 million for costs related to the
5 environmental assessment and associated stakeholder consultation activities. Of
6 this amount, approximately \$8.6 million was incurred up to the end of May 2011.

1 Q. What costs have been factored in for environmental assessments?

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4 A. The Decision Gate 2 capital cost estimates for the Muskrat Falls Generating Facility
5 and the Labrador – Island Transmission Link used in the CPW analysis include
6 approximately \$23 million for costs related to the environmental assessment and
7 associated stakeholder consultation activities. Of this amount, approximately \$15.3
8 million was incurred up to the end of May 2011.

1 Q. What costs have been factored in for land owner easements, expropriations, and
2 purchases?

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5 A. The Decision Gate 2 capital cost estimate for Muskrat Falls Generating Facility and
6 the Labrador – Island Transmission Link includes approximately \$9.5 million
7 provisional amount for land owner easements, expropriations, land use royalties,
8 and land acquisition.

1 Q. With respect to Document 1500 “Electrode Review – Confirmation of Type and Site
2 Selection”

3 a. Where is the cost estimate of \$8.2 million set out in section 6.6 on page 86
4 included in the CPW numbers?

5 b. At the bottom of page 88, several recommendations have been suggested to
6 improve the confidence level associated with the assumptions. Have these
7 recommendations been carried out and if not/so, what are the cost
8 implications?

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11 A. a. Nalcor's more refined estimate of \$12.4 million, net of engineering, which is
12 recovered in a separate line item, was based upon internal review and is
13 included in Labrador Island Link assessment.

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15 b. As the recommendations were relatively immaterial and inconsequential, they
16 are considered to be included within the error on the estimate on the overall
17 costs.

1 Q. With respect to Document MF 1010 “Pre-Feed Engineering Study – Muskrat Falls –
2 Study of Variants”

3 a. It is indicated the unit prices were updated to the 2007 base year from the
4 1999 report. Please identify where the revised numbers shown in Appendix
5 D have been included in the CPW output?
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8 A. The Document MF 1010 “Pre-Feed Engineering Study – Muskrat Falls – Study of
9 Variants” does not form the cost basis for the CPW analysis, rather it provides input
10 into the cost estimate developed by Nalcor. To this effect, MF 1010 provides critical
11 layout and quantities input into the estimate, however all unit prices, contracting
12 strategy, productivity and scheduling related inputs to the Decision Gate 2 estimate
13 were determined by the Nalcor Project Team.