Q. Further to PUB-Nalcor-146, in light of this error, have all other sensitivities and/or analyses completed by Nalcor been reviewed to determine whether they contain the same or other calculation errors?

A. The key underlying analyses related to the base case generation expansion alternatives include Exhibit 99, filed in response to MHI-Nalcor-1, and the Excel spreadsheets filed in response to MHI-Nalcor-49. These analyses for the Isolated and Interconnected generation expansion alternatives duplicated *Strategist* calculations so they were visible in Excel format, and confirmed the cumulative present worth (CPW) calculations performed by Strategist and the $2.2 billion CPW preference for the Interconnected Island generation expansion alternative.

With regard to calculations affecting the escalating supply price for Muskrat Falls power purchases, a simplified financial model was developed in response to MHI-Nalcor-117. This model confirmed that the $76/MWh used for the base case provided an 8.4% internal rate of return as intended.

One other load sensitivity was developed from the same template which caused the error with the original Exhibit 43, and this sensitivity, with its minor correction, was also revised on Exhibit 43, Rev. 1. The remaining sensitivities have been reviewed, and Nalcor believes that the results are reasonable and indicative of the sensitivities modeled.

Depending on the scenario, one or more of the following procedures were used to verify and rationalize the various scenario results:

(a) Performing spot checks on formulas for selected data series over the analysis horizon;
(b) Relating new data to previous data in some way;
(c) Verifying results with separate analysis; and
(d) Verifying results through alternate means.

The following is a list of sensitivities, and the corresponding verification procedures performed for each:

Exhibit 43 Revision 1:

(1) Fuel costs decreased by 44%:
Cost impacts were calculated each year, and annual results were discounted over the analysis horizon to derive CPW results. These results were checked by adjusting the total CPWs of fuel costs for both base cases by the same reduction factor and confirming the differences.

(2) Fuel costs PIRA Low:
Results were verified through separate independent analysis; and
Sample detail calculations were manually traced and reported in the response to CA KPR-Nalcor-56.

(3) Fuel costs PIRA High:
Sample detail calculations were manually traced and reported in the response to CA KPR-Nalcor-56; and
Spot checks were performed on other formulas.

(4) Fuel Costs May 2011 Forecast:
Sample detail calculations were manually traced and reported in the response to MHI-Nalcor-60; and
Spot checks were performed on other formulas.

(5) Capital – Labrador-Island Link capital costs adjusted by +25%:
The CPW of the fixed charge component of the Labrador-Island Transmission Link for the base case was calculated from Exhibit 99 filed in response to MHI-Nalcor-1 ($1,593 million). The scenario adjusted the CPW of the base case by $398 million, which was confirmed as 25% of the base case Labrador-Island Transmission Link fixed charges.

(6) Capital – Muskrat Falls capital costs adjusted by +25%:
The change in Muskrat Falls capital costs was accommodated by a change in the Muskrat Falls escalating supply rate. This rate was provided by PWC, and was determined by running the detailed Muskrat Falls financial model. The revised escalating supply rate was confirmed with the summary Muskrat Falls model, provided in response to MHI-Nalcor-117.

(7) Capital – Muskrat Falls and LIL capital costs adjusted by +25%:
The base case differences for the two preceding sensitivities were totaled and confirmed.

(8) Load - Annual load decrease of 880 GWh (Rev. 1):
Once the error had been detected as explained in PUB-Nalcor-146, the revised results were compared with the Strategist results for the fuel impact related to load, as reported in PUB-Nalcor-53. The sensitivity produced a CPW

difference for fuel of $3,129 million, versus the Strategist difference of $3,153 million. The $24 million difference between the sensitivity result and the more detailed Strategist result was considered reasonable for a sensitivity analysis; and

Spot checks were performed on other formulas.

(9) Load - Reduce annual percentage load growth by 50% post 2014 (Rev. 1):

Reliance was placed on the Strategist confirmation of the revised template results for the load reduction of 880 GWh; and

Spot checks were performed on formulas.

(10) Load - Annual Load Decrease of 1086 GWh (New):

Reliance was placed on the Strategist confirmation of the revised template results for the load reduction of 880 GWh; and

Spot checks were performed on formulas.

PUB-Nalcor-54:

(11) Fuel costs decreased by 20%; Muskrat Falls and LIL capital costs increased by 20%:

Cost impacts were calculated each year, and annual results were discounted over the analysis horizon to derive CPW results. These results were checked by adjusting the total CPWs of fuel costs for both base cases by the same reduction factor and confirming the differences.

The change in Muskrat Falls capital costs was accommodated by a change in the Muskrat Falls escalating supply rate. This rate was provided by PWC, and was determined by running the detailed Muskrat Falls financial model. The

revised escalating supply rate was confirmed with the summary Muskrat Falls model, provided in response to MHI-Nalcor-117.

The CPW of the fixed charge component of the Labrador-Island Transmission Link for the base case was calculated from Exhibit 99 filed in response to MHI-Nalcor-1 ($1,593 million). The scenario adjusted the CPW of the base case fixed charges by $318 million, which was confirmed as 20% of the base case Labrador-Island Transmission Link fixed charges.

PUB-Nalcor-118:

(12) Muskrat Falls and LIL capital costs increased by 50%:

The change in Muskrat Falls capital costs was accommodated by a change in the Muskrat Falls escalating supply rate. This rate was provided by PWC, and was determined by running the detailed Muskrat Falls financial model. The revised escalating supply rate was confirmed with the summary Muskrat Falls model, provided in response to MHI-Nalcor-117.

The CPW of the fixed charge component of the Labrador-Island Transmission Link for the base case was calculated from Exhibit 99 filed in response to MHI-Nalcor-1 ($1,593 million). The scenario adjusted the CPW of the base case fixed charges by $796 million, which was confirmed as 50% of the base case Labrador-Island Transmission Link fixed charges.

CA/KPR-Nalcor-22:

(13) 1% increase in interest rates:

To verify the increase in CPW for the Labrador-Island Transmission Link, the spreadsheet created for MHI-Nalcor-1 was used as a template. The increased

in-service capital costs (increase of $42.7 million) and the increased weighted average cost of capital (increase of 0.75% - 75% debt x 1%) were input, and produced a CPW for fixed charges of $1,734 million. This confirmed the $141 million increase in CPW fixed charges over the base case of $1,593 million associated with the Labrador-Island Transmission Link.

CA/KPR-Nalcor-23:

(14) 1% increase in equity return:

The increase in CPW reported for this sensitivity of $556 million was related to both the Labrador-Island Transmission Link and Muskrat Falls. Of this total amount, $51 million was attributed to the Labrador-Island Transmission Link and the remaining amount of $505 million was associated with Muskrat Falls.

To verify the increase in CPW for the Labrador-Island Transmission Link, the spreadsheet created for MHI-Nalcor-1 was used as a template. The increased in-service capital costs (increase of $21 million) and the increased weighted average cost of capital (increase of 0.25% - 25% equity x 1%) were input, and produced a CPW for fixed charges of $1,644 million. This confirmed the $51 million increase in CPW fixed charges over the base case of $1,593 million associated with the Labrador-Island Transmission Link.

The change in Muskrat Falls IRR to equity was accommodated by a change in the Muskrat Falls escalating supply rate. This rate was provided by PWC, and was determined by running the detailed Muskrat Falls financial model. The revised escalating supply rate was confirmed with the summary Muskrat Falls model, provided in response to MHI-Nalcor-117.

CA/KPR-Nalcor-24:

(15) Fuel costs decreased by 20%:

The fuel component of PUB-Nalcor-54 was reviewed and reproduced for the response to this RFI.

CA/KPR-Nalcor-58 (currently in progress)

(16) Fuel costs May 2011 low forecast:

Results were rationalized in relation to the previous low fuel forecast sensitivity, reported on Exhibit 43; and

Spot checks were performed on formulas.

(17) Fuel costs May 2011 high forecast:

Results were rationalized in relation to the previous high fuel forecast sensitivity, reported on Exhibit 43; and

Spot checks were performed on formulas.