Q. The response to MHI-Nalcor-41 Rev. 1 contains a revision to a CPW sensitivity using an Annual Load Decrease of 880 GWh. The original results of this sensitivity conducted by Nalcor showed a difference in the Cumulative Present Worth of the Isolated Island and Labrador Interconnected Options of only $1 million, i.e. the two alternatives were basically equal from a CPW perspective.

The revision now shows a difference of $408 million in favour of the Labrador Interconnection. Nalcor states that this revision provides a correction for a calculation error and now properly reflects the reduction in fuel costs for the Interconnected Island alternative.

Please provide the specifics of this calculation error.

A. The load scenarios in Exhibit 43 were built up from the response to MHI-Nalcor-49.1 Fuel Costs, and were derived through a load adjustment to production. Figure 1 following shows the original Exhibit 43. The formula for 2010 (Cell E49) correctly refers to the adjusted production line on Row 47. In error, this formula was not copied across all years, leaving the formulas for 2011 to 2016 still referring to the original production amounts. As Figure 1 shows, Holyrood fuel costs on the original Exhibit 43 for the Interconnected Island alternative for the years 2010 to 2016 match those of the base case on MHI-Nalcor-49.1. The formulas which are in error start in Cell F49, and the formula displayed at the top of Figure 1 shows the incorrect reference to Row 45, which is the original production.

Figure 1: Original Exhibit 43

F49 =F45*F48*F$42

	A	B	C	D	E	F	G	H	I	J	K
1	NEWFOUNDLAND AND LABRADOR HYDRO										
2	Generation Expansion Analysis 2010 Interconnection Alternative										
3	Load Sensitivity										
4		Load Decrease (GWh):			0	0	0	880	880	880	880
5		Minimum (GWh):	2								
6			Factor		2010	2011	2012	2013	2014	2015	2016
40		NO. 6 FUEL 0.7%s:									
41		$/bbl (Fuel Forecast)			81.30	83.20	90.90	98.80	102.60	106.80	111.10
42		$/Mbtu	6.287	MBTU/MWh	12.931	13.234	14.458	15.715	16.319	16.987	17.671
43											
44		*Holyrood* (2)									
45		Production (GWh)			1,032.8	952.5	997.1	1,352.5	1,620.5	1,736.6	1,753.0
46		Adjustment			0.0	0.0	0.0	(872.4)	(867.1)	(863.3)	(862.7)
47		Net			1,032.8	952.5	997.1	480.2	753.5	873.2	890.3
48		MBTU/MWh			9.956	9.963	9.963	9.982	9.954	9.928	9.927
49		Fuel cost ($000)			132,962	125,597	143,630	212,169	263,238	292,867	307,523
50											
51		TOTALS:									
52		Production (GWh)			1,038.9	957.2	1,002.2	1,362.6	1,637.1	1,757.6	1,774.7
53		Adjustment			0.0	0.0	0.0	(880.0)	(880.0)	(880.0)	(880.0)
54		Net			1,038.9	957.2	1,002.2	482.6	757.1	877.6	894.7
55		Fuel cost ($000)			134,330	126,675	144,921	212,827	264,179	294,048	308,760
56		CPW			**1,142,105**						

Figure 2 following shows the revised Exhibit 43, with formulas correctly referring to the adjusted production on Row 47.

Figure 2: Revised Exhibit 43

F49 =F47*F48*F$42

	A	B	C	D	E	F	G	H	I	J	K
1	NEWFOUNDLAND AND LABRADOR HYDRO										
2	Generation Expansion Analysis 2010 Interconnection Alternative										
3	Load Sensitivity										
4		Load Decrease (GWh):			0	0	0	880	880	880	880
5		Minimum (GWh):	2								
6			Factor		2010	2011	2012	2013	2014	2015	2016
40		NO. 6 FUEL 0.7%s:									
41		$/bbl (Fuel Forecast)			81.30	83.20	90.90	98.80	102.60	106.80	111.10
42		$/Mbtu	6.287	MBTU/MWh	12.931	13.234	14.458	15.715	16.319	16.987	17.671
43											
44		*Holyrood* (2)									
45		Production (GWh)			1,032.8	952.5	997.1	1,352.5	1,620.5	1,736.6	1,753.0
46		Adjustment			0.0	0.0	0.0	(872.4)	(867.1)	(863.3)	(862.7)
47		Net			1,032.8	952.5	997.1	480.2	753.5	873.2	890.3
48		MBTU/MWh			9.956	9.963	9.963	9.982	9.954	9.928	9.927
49		Fuel cost ($000)			132,962	125,597	143,630	75,325	122,392	147,265	156,179
50											
51		TOTALS:									
52		Production (GWh)			1,038.9	957.2	1,002.2	1,362.6	1,637.1	1,757.6	1,774.7
53		Adjustment			0.0	0.0	0.0	(880.0)	(880.0)	(880.0)	(880.0)
54		Net			1,038.9	957.2	1,002.2	482.6	757.1	877.6	894.7
55		Fuel cost ($000)			134,330	126,675	144,921	75,984	123,333	148,446	157,416
56		CPW			**735,480**						