

1 Q. In the Nalcor Submission, page 126 of 158 Revision 1, Nalcor provides Table 1:
2 Summary of CPW Sensitivity Analysis with Respect to Reference Case and
3 Preference (Present Value 2010 \$, millions). In Table 1, it refers to a "PIRA High
4 World Oil Forecast" and a "PIRA Low world Oil Forecast."

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6 (a) Please provide a copy of each of these forecasts and provide the date
7 when each was made.

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9 (b) Please also show the calculations as to how each of the forecasts yields the
10 amount shown in the 'Preference for Interconnected Island' Column.

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13 A. (a) Please refer to Exhibit 43 Rev. 1, p. 10 for the requested fuel forecasts. The low
14 and high thermal fuel price forecast as of March 2010 is based on PIRA's
15 Scenario Planning Service forecast for 2010 Q1.

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17 (b) The starting point is the fuel price series for the Base Case, presented on page
18 10 of Exhibit 43. As noted at the bottom of page 10, No. 6 fuel costs for the
19 Isolated Island Alternative were based on 0.7% sulphur content up to and
20 including 2015, and after pollution controls are installed at Holyrood in 2015,
21 switched to 2.2% sulphur content for the remainder of the study period. For the
22 Interconnected Island Alternative, the reference fuel price series for 0.7% S was
23 used for all years.

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25 Fuel factors, shown on page 11, were derived by relating the Low and High
26 forecast fuel prices for the sensitivities to those used for the Base Case.

Once the fuel factors had been calculated, they were brought forward to the sensitivity worksheets (pages 7 and 8 of Exhibit 43) and applied to the fuel costs used in the base cases. Fuel costs by type for the base cases were presented in Exhibit 99 filed in response to MHI-Nalcor-1.

Sample calculations for 2016, for both the Low and High Fuel Price Sensitivities, are illustrated in the following tables:

2016	(A) PIRA Low	(B) Base Case	(C) Fuel Factor (A / B)	(D) Base Case Fuel Costs (\$ 000)	(E) Sensitivity Fuel Costs (C x D)
ISOLATED ISLAND:					
Isolated Island #6 2.2% _s (\$/bbl) <i>Exhibit 43 Rev. 1 References</i>	50.70 <i>p. 10, Col. 6</i>	107.00 <i>p. 10, Col. 5</i>	0.47383 <i>p. 11, Col. 5</i>	252,720 <i>p. 7, Col. 2</i>	119,747 <i>p. 7, Col. 7</i>
#2 Diesel (\$/litre) <i>Exhibit 43 Rev. 1 References</i>	0.385 <i>p. 10, Col. 9</i>	0.945 <i>p. 10, Col. 8</i>	0.40741 <i>p. 11, Col. 4</i>	4,320 <i>p. 7, Col. 3</i>	1,760 <i>p. 7, Col. 8</i>
INTERCONNECTED ISLAND:					
Interconnected #6 0.7% _s (\$/bbl) <i>Exhibit 43 Rev. 1 References</i>	52.60 <i>p. 10, Col. 3</i>	111.10 <i>p. 10, Col. 2</i>	0.47345 <i>p. 11, Col. 2</i>	307,523 <i>p. 7, Col. 10</i>	145,596 <i>p. 7, Col. 15</i>
#2 Diesel (\$/litre) <i>Exhibit 43 Rev. 1 References</i>	0.385 <i>p. 10, Col. 9</i>	0.945 <i>p. 10, Col. 8</i>	0.40741 <i>p. 11, Col. 4</i>	6,041 <i>p. 7, Col. 11</i>	2,461 <i>p. 7, Col. 16</i>

2016	(A) PIRA High	(B) Base Case	(C) Fuel Factor (A / B)	(D) Base Case Fuel Costs (\$ 000)	(E) Sensitivity Fuel Costs (C x D)
ISOLATED ISLAND:					
Isolated Island #6 2.2% _s (\$/bbl) <i>Exhibit 43 Rev. 1 References</i>	189.80 <i>p. 10, Col. 7</i>	107.00 <i>p. 10, Col. 5</i>	1.77383 <i>p. 11, Col. 9</i>	252,720 <i>p. 8, Col. 2</i>	448,283 <i>p. 8, Col. 7</i>
#2 Diesel (\$/litre) <i>Exhibit 43 Rev. 1 References</i>	1.72 <i>p. 10, Col. 10</i>	0.945 <i>p. 10, Col. 8</i>	1.82011 <i>p. 11, Col. 8</i>	4,320 <i>p. 8, Col. 3</i>	7,863 <i>p. 8, Col. 8</i>
INTERCONNECTED ISLAND:					
Interconnected #6 0.7% _s (\$/bbl) <i>Exhibit 43 Rev. 1 References</i>	197.00 <i>p. 10, Col. 4</i>	111.10 <i>p. 10, Col. 2</i>	1.77318 <i>p. 11, Col. 6</i>	307,523 <i>p. 8, Col. 10</i>	545,293 <i>p. 8, Col. 15</i>
#2 Diesel (\$/litre) <i>Exhibit 43 Rev. 1 References</i>	1.72 <i>p. 10, Col. 10</i>	0.945 <i>p. 10, Col. 8</i>	1.82011 <i>p. 11, Col. 8</i>	6,041 <i>p. 8, Col. 11</i>	10,995 <i>p. 8, Col. 16</i>

1 The CPW for each alternative for the low fuel sensitivity was calculated on the
2 first line on page 7. For the Isolated Island alternative for the low fuel
3 sensitivity, the value (in \$000) of \$3,459,645 is reported in column 9. For the
4 Interconnected Island alternative for the low fuel sensitivity, the value (in \$000)
5 of \$618,393 is reported in column 17.

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7 The CPW for each alternative for the high fuel sensitivity was calculated on the
8 first line on page 8. For the Isolated Island alternative for the high fuel
9 sensitivity, the value (in \$000) of \$10,060,838 is reported in column 9. For the
10 Interconnected Island alternative for the high fuel sensitivity, the value (in \$000)
11 of \$1,866,186 is reported in column 17.

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13 These values were brought forward to the Fuel lines for the “Fuel Costs: PIRA
14 Low” and the “Fuel Costs: PIRA High” sensitivities on the Results worksheet
15 (Exhibit 43, p. 3), replacing fuel costs reported for each base case.

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17 The sensitivity totals shown on the Results worksheet are those reported on p.
18 126 of Nalcor’s Submission.