Q. (Summary Report - Additional Cost of Service Information, page 7, lines 13 to 16) Please provide a table showing a representative purchase from the ISO New England pool (i.e., the hub price) on a weekday in March 2017 for 100 MW for each hour between the hours of 7 am and 11 pm including the cost of energy and the cost of transmission (wheeling) by zone/jurisdiction for delivery to the Island Interconnected System.
A. CA-NLH-263 Attachment 1, prepared by Nalcor Energy Marketing, illustrates what it would have cost to purchase energy from the ISO New England day-ahead market and deliver it to the Island Interconnected System on Friday, March 31, 2017. Friday, March 31, 2017 is considered representative of prices for that month in which the average daily on-peak prices ranged from a low of US $\$ 20.54 / \mathrm{MWh}$ to a high of US $\$ 64.13 / \mathrm{MWh}$ for energy purchased from ISO-NE Salisbury Trading Node.

Please note that 111 MWh Salisbury Trading Node must be purchased from ISO-NE in order to receive 100 MWh delivered to the Island Interconnected System due to system losses.

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| Eastern Time 3/31/2017 | New England |  |  |  |  |  |  |  | New Brunswick |  |  |  | Nova Scotia |  |  |  | Maritime Link |  |  |  | Newfoundland |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Purchase Price (US\$/MWh) |  | Total ISO-NE Purchase Price (US\$/MWh) | Exchange Rate (CAD/USD) | Total ISO-NE Purchase Price (C\$/MWh) | Total ISO-NE Purchase Price (C\$) | Delivered to $\qquad$ (MWh) | NB Wheeling (C\$/MWh) | NB Wheeling Cost (C\$) | NB Loss Rate | Energy Delivered to NS $(\mathrm{MWh})$ | NS Wheeling ( $\mathrm{C} / \mathrm{MWh}$ ) | NS Wheeling Cost (C\$) | NS Loss Rate |  | Maritime Link Wheeling Cost <br> (C\$/MWh) | Maritime Link Wheeling Cost (C\$) | Maritime Link | Delivered to NL at Bottom Brook (MWh) |  | Total Cost to Purchase and Deliver Energy (CS) | Total Cost to Deliver Energy (C\$/MWh) |
|  | $A=H$ | B |  | $D=(B+C)$ | E | $\mathrm{F}=(\mathrm{D} * \mathrm{E})$ | $\mathrm{G}=\left(\mathrm{A}^{*} \mathrm{~F}\right)$ | $H=L^{*}(1+K)$ | 1 | $\mathrm{J}=\left(1^{*} \mathrm{H}\right)$ | K | $L=P *(1+0)$ | M | $\mathrm{N}=\left(L^{*} \mathrm{M}\right)$ | 0 | $\mathrm{P}=\mathrm{T} *(1+\mathrm{S})$ | Q | $\mathrm{R}=(\mathrm{P} * \mathrm{Q})$ | s |  |  | $=(G+J+N+R)$ | $\mathrm{V}=\mathrm{U} / \mathrm{T}$ |
| Hour Ending 8 | 111 | \$33.57 | \$14.89 | \$48.46 | ${ }^{1.331}$ | \$64.50 | \$7,159.16 | 111 | 57.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$9,691.01 | \$96.91 |
| Hour Ending 9 | 111 | \$37.60 | \$14.89 | \$52.49 | 1.331 | \$69.86 | \$7,754.56 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,286.40 | \$102.86 |
| Hour Ending 10 | 111 | \$38.54 | \$14.89 | \$53.43 | 1.331 | \$71.11 | \$7,893.43 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,425.28 | \$104.25 |
| Hour Ending 11 | 111 | \$44.70 | \$14.89 | \$59.59 | 1.331 | \$79.31 | \$8,803.52 | 111 | 57.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$11,335.37 | \$113.35 |
| Hour Ending 12 | 111 | \$44.28 | \$14.89 | \$59.17 | 1.331 | \$78.75 | \$8,741.47 | 111 | 57.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$11,273.31 | \$112.73 |
| Hour Ending 13 | 111 | \$41.67 | \$14.89 | \$56.56 | 1.331 | \$75.28 | \$8,355.86 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,887.71 | \$108.88 |
| Hour Ending 14 | 111 | \$43.98 | \$14.89 | \$58.87 | 1.331 | \$78.35 | \$8,697.14 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$11,228.99 | \$112.29 |
| Hour Ending 15 | 111 | \$38.74 | \$14.89 | \$53.63 | 1.331 | \$71.38 | \$7,922.98 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,454.83 | \$104.55 |
| Hour Ending 16 | 111 | \$38.58 | \$14.89 | \$53.47 | 1.331 | \$71.17 | \$7,899.34 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,431.19 | \$104.31 |
| Hour Ending 17 | 111 | \$39.84 | \$14.89 | \$54.73 | 1.331 | \$72.84 | \$8,085.50 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,617.34 | \$106.17 |
| Hour Ending 18 | 111 | \$45.72 | \$14.89 | \$60.61 | 1.331 | \$80.67 | \$8,954.21 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$11,486.06 | \$114.86 |
| Hour Ending 19 | 111 | \$39.96 | \$14.89 | \$54.85 | 1.331 | \$73.00 | \$8,103.22 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,635.07 | \$106.35 |
| Hour Ending 20 | 111 | \$38.28 | \$14.89 | \$53.17 | 1.331 | \$70.77 | \$7,855.02 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,386.87 | \$103.87 |
| Hour Ending 21 | 111 | \$33.77 | \$14.89 | \$48.66 | 1.331 | \$64.76 | \$7,188.71 | 111 | 57.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$9,720.56 | \$97.21 |
| Hour Ending 22 | 111 | \$36.15 | \$14.89 | \$51.04 | 1.331 | \$67.93 | \$7,540.33 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | \$0.00 | 4.06\% | 100 |  | \$10,072.18 | \$100.72 |
| Hour Ending 23 | 111 | \$34.68 | \$14.89 | \$49.57 | 1.331 | \$65.97 | \$7,323.15 | 111 | \$7.18 | \$796.91 | 3.30\% | 107 | \$16.21 | \$1,734.94 | 2.78\% | 104 | \$0.00 | 50.00 | 4.06\% | 100 |  | \$9,855.00 | \$98.55 |

${ }^{* *}$ This illustration does not include any additional wheeling fees for use of the Maritime Link transmission rights nor does it include any additional marketing fees.
SO-NE = New England System Operator
NB $=$ New Brunswick
NB $=$ New Brunswick
NS $=$ Nova Sotia

