

- 1 Q. With reference to Nalcor's presentation on July 18, 2011, please provide full details
2 of the calculations resulting in the Island Average Domestic Rate Projections (Slide
3 26).
4
5
- 6 A. Please see the following pages for a summary of data calculations used in Slide 26.
7 The rate projections reflect cost trends at the wholesale level and do not represent
8 rate analysis at a distribution cost of service level detail.

Hydro's Wholesale and Retail Rate Estimates: Muskrat Falls - Labrador Island Transmission Link Electricity Supply Future

| | Energy Delivered by Hydro at Transmission Level GWH | Island Interconnected Revenue Requirement \$000 | Island Interconnected Average Wholesale Rate \$/MWh | Projected Wholesale Rate to Nfld Power \$/MWh | Nfld Power Pass Through of Hydro Costs to Retail Rate % | Retail Rate Projections Cents per KWh |
|------|---|---|---|--|---|---|
| 2010 | 6,044.8 | 377,584 | 62.46 | 68.77 | 66.8% | 11.73 |
| 2011 | 6,124.7 | 416,470 | 68.00 | 64.24 | 66.8% | 11.21 |
| 2012 | 6,493.0 | 475,478 | 73.23 | 70.75 | 66.8% | 11.97 |
| 2013 | 6,886.3 | 557,459 | 80.95 | 82.75 | 66.8% | 13.33 |
| 2014 | 6,984.6 | 584,408 | 83.67 | 86.20 | 66.8% | 13.70 |
| 2015 | 7,103.7 | 624,440 | 87.90 | 91.68 | 66.8% | 14.28 |
| 2016 | 7,119.7 | 648,177 | 91.04 | 95.64 | 66.8% | 14.69 |
| 2017 | 7,153.7 | 765,135 | 106.96 | 112.62 | 66.8% | 16.44 |
| 2018 | 7,222.4 | 781,387 | 108.19 | 114.56 | 66.8% | 16.63 |
| 2019 | 7,291.3 | 804,891 | 110.39 | 117.83 | 66.8% | 16.94 |
| 2020 | 7,353.1 | 810,652 | 110.25 | 118.05 | 66.8% | 16.97 |
| 2021 | 7,446.9 | 797,548 | 107.10 | 115.12 | 66.8% | 16.68 |
| 2022 | 7,538.7 | 803,229 | 106.55 | 114.79 | 66.8% | 16.65 |
| 2023 | 7,644.1 | 810,483 | 106.03 | 114.42 | 66.8% | 16.62 |
| 2024 | 7,706.7 | 818,746 | 106.24 | 114.90 | 66.8% | 16.66 |
| 2025 | 7,764.0 | 830,467 | 106.96 | 115.88 | 66.8% | 16.76 |
| 2026 | 7,845.5 | 847,435 | 108.02 | 117.12 | 66.8% | 16.88 |
| 2027 | 7,933.4 | 863,679 | 108.87 | 118.15 | 66.8% | 16.98 |
| 2028 | 8,013.8 | 880,782 | 109.91 | 119.39 | 66.8% | 17.10 |
| 2029 | 8,093.1 | 905,310 | 111.86 | 121.54 | 66.8% | 17.30 |
| 2030 | 8,168.9 | 923,845 | 113.09 | 122.87 | 66.8% | 17.43 |
| 2031 | 8,244.7 | 936,319 | 113.57 | 123.37 | 66.8% | 17.47 |
| 2032 | 8,320.5 | 955,667 | 114.86 | 124.72 | 66.8% | 17.60 |
| 2033 | 8,396.3 | 970,062 | 115.53 | 125.44 | 66.8% | 17.67 |
| 2034 | 8,472.1 | 990,836 | 116.95 | 126.92 | 66.8% | 17.81 |
| 2035 | 8,540.3 | 1,004,607 | 117.63 | 127.68 | 66.8% | 17.88 |
| 2036 | 8,608.5 | 1,019,329 | 118.41 | 128.45 | 66.8% | 17.95 |
| 2037 | 8,676.8 | 1,048,463 | 120.84 | 130.95 | 66.8% | 18.19 |
| 2038 | 8,745.0 | 1,098,597 | 125.63 | 136.03 | 66.8% | 18.66 |
| 2039 | 8,813.2 | 1,118,794 | 126.95 | 137.45 | 66.8% | 18.79 |
| 2040 | 8,873.9 | 1,134,591 | 127.86 | 138.47 | 66.8% | 18.88 |
| 2041 | 8,934.5 | 1,156,525 | 129.44 | 140.20 | 66.8% | 19.04 |
| 2042 | 8,995.2 | 1,176,540 | 130.80 | 141.67 | 66.8% | 19.17 |
| 2043 | 9,055.9 | 1,199,891 | 132.50 | 143.54 | 66.8% | 19.34 |
| 2044 | 9,116.5 | 1,222,613 | 134.11 | 145.32 | 66.8% | 19.50 |
| 2045 | 9,177.2 | 1,247,059 | 135.89 | 147.29 | 66.8% | 19.68 |
| 2046 | 9,237.8 | 1,279,704 | 138.53 | 150.11 | 66.8% | 19.93 |
| 2047 | 9,298.5 | 1,317,695 | 141.71 | 153.54 | 66.8% | 20.23 |
| 2048 | 9,359.2 | 1,343,291 | 143.53 | 155.54 | 66.8% | 20.41 |
| 2049 | 9,419.8 | 1,370,029 | 145.44 | 157.66 | 66.8% | 20.60 |
| 2050 | 9,472.9 | 1,401,310 | 147.93 | 160.36 | 66.8% | 20.83 |
| 2051 | 9,526.0 | 1,439,880 | 151.15 | 163.87 | 66.8% | 21.14 |
| 2052 | 9,579.1 | 1,467,830 | 153.23 | 166.18 | 66.8% | 21.33 |
| 2053 | 9,632.2 | 1,491,959 | 154.89 | 168.07 | 66.8% | 21.50 |
| 2054 | 9,685.3 | 1,526,614 | 157.62 | 171.01 | 66.8% | 21.75 |
| 2055 | 9,738.4 | 1,572,215 | 161.44 | 175.17 | 66.8% | 22.10 |
| 2056 | 9,791.5 | 1,604,820 | 163.90 | 177.89 | 66.8% | 22.33 |
| 2057 | 9,844.6 | 1,634,189 | 166.00 | 180.25 | 66.8% | 22.53 |
| 2058 | 9,897.7 | 1,663,605 | 168.08 | 182.57 | 66.8% | 22.72 |
| 2059 | 9,950.8 | 1,700,336 | 170.87 | 185.70 | 66.8% | 22.98 |
| 2060 | 10,003.9 | 1,724,130 | 172.35 | 187.45 | 66.8% | 23.13 |
| 2061 | 10,057.0 | 1,749,757 | 173.98 | 189.39 | 66.8% | 23.29 |
| 2062 | 10,110.1 | 1,776,956 | 175.76 | 191.48 | 66.8% | 23.46 |
| 2063 | 10,163.2 | 1,813,751 | 178.46 | 194.48 | 66.8% | 23.70 |
| 2064 | 10,216.3 | 1,856,229 | 181.69 | 198.11 | 66.8% | 24.00 |
| 2065 | 10,269.4 | 1,887,383 | 183.79 | 200.54 | 66.8% | 24.20 |
| 2066 | 10,322.5 | 1,936,347 | 187.59 | 204.66 | 66.8% | 24.53 |
| 2067 | 10,375.5 | 1,941,406 | 187.11 | 204.53 | 66.8% | 24.52 |

See accompanying notes.

Hydro's Wholesale and Retail Rate Estimates: Isolated Island Electricity Supply Future

| | Energy Delivered by Hydro at Transmission Level GWH | Island Interconnected Revenue Requirement \$000 | Island Interconnected Average Wholesale Rate \$/MWh | Projected Wholesale Rate to Nfld Power \$/MWh | Nfld Power Pass Through of Hydro Costs to Retail Rate % | Retail Rate Projections Cents per KWh |
|------|---|---|---|--|---|---|
| 2010 | 6,044.8 | 377,584 | 62.46 | 68.77 | 66.8% | 11.73 |
| 2011 | 6,124.7 | 416,470 | 68.00 | 64.24 | 66.8% | 11.21 |
| 2012 | 6,493.0 | 475,011 | 73.16 | 70.67 | 66.8% | 11.96 |
| 2013 | 6,886.3 | 556,552 | 80.82 | 82.61 | 66.8% | 13.31 |
| 2014 | 6,984.6 | 578,344 | 82.80 | 85.34 | 66.8% | 13.61 |
| 2015 | 7,103.7 | 650,331 | 91.55 | 94.65 | 66.8% | 14.60 |
| 2016 | 7,119.7 | 694,039 | 97.48 | 102.58 | 66.8% | 15.42 |
| 2017 | 7,153.7 | 716,838 | 100.21 | 105.97 | 66.8% | 15.76 |
| 2018 | 7,222.4 | 751,519 | 104.05 | 109.74 | 66.8% | 16.13 |
| 2019 | 7,291.3 | 771,740 | 105.84 | 111.94 | 66.8% | 16.35 |
| 2020 | 7,353.1 | 804,097 | 109.35 | 116.21 | 66.8% | 16.76 |
| 2021 | 7,446.9 | 810,221 | 108.80 | 116.06 | 66.8% | 16.75 |
| 2022 | 7,538.7 | 851,654 | 112.97 | 120.38 | 66.8% | 17.17 |
| 2023 | 7,644.1 | 906,154 | 118.54 | 126.26 | 66.8% | 17.73 |
| 2024 | 7,706.7 | 930,539 | 120.74 | 128.68 | 66.8% | 17.95 |
| 2025 | 7,764.0 | 960,220 | 123.68 | 131.92 | 66.8% | 18.25 |
| 2026 | 7,845.5 | 988,010 | 125.93 | 134.31 | 66.8% | 18.48 |
| 2027 | 7,933.4 | 1,022,809 | 128.93 | 137.44 | 66.8% | 18.76 |
| 2028 | 8,013.8 | 1,067,838 | 133.25 | 141.98 | 66.8% | 19.18 |
| 2029 | 8,093.1 | 1,108,069 | 136.92 | 145.86 | 66.8% | 19.53 |
| 2030 | 8,168.9 | 1,144,931 | 140.16 | 149.14 | 66.8% | 19.82 |
| 2031 | 8,244.7 | 1,179,270 | 143.03 | 152.08 | 66.8% | 20.08 |
| 2032 | 8,320.5 | 1,211,328 | 145.58 | 154.65 | 66.8% | 20.31 |
| 2033 | 8,396.3 | 1,279,220 | 152.36 | 161.38 | 66.8% | 20.90 |
| 2034 | 8,472.1 | 1,480,844 | 174.79 | 183.74 | 66.8% | 22.83 |
| 2035 | 8,540.3 | 1,515,177 | 177.41 | 186.61 | 66.8% | 23.07 |
| 2036 | 8,608.5 | 1,575,048 | 182.96 | 192.21 | 66.8% | 23.53 |
| 2037 | 8,676.8 | 1,664,755 | 191.86 | 201.14 | 66.8% | 24.26 |
| 2038 | 8,745.0 | 1,710,951 | 195.65 | 205.13 | 66.8% | 24.59 |
| 2039 | 8,813.2 | 1,758,329 | 199.51 | 209.16 | 66.8% | 24.91 |
| 2040 | 8,873.9 | 1,803,932 | 203.29 | 213.04 | 66.8% | 25.22 |
| 2041 | 8,934.5 | 1,850,017 | 207.06 | 216.94 | 66.8% | 25.53 |
| 2042 | 8,995.2 | 1,901,875 | 211.43 | 221.41 | 66.8% | 25.88 |
| 2043 | 9,055.9 | 1,963,360 | 216.81 | 226.99 | 66.8% | 26.31 |
| 2044 | 9,116.5 | 2,016,801 | 221.22 | 231.56 | 66.8% | 26.67 |
| 2045 | 9,177.2 | 2,072,425 | 225.82 | 236.34 | 66.8% | 27.03 |
| 2046 | 9,237.8 | 2,135,045 | 231.12 | 241.80 | 66.8% | 27.45 |
| 2047 | 9,298.5 | 2,205,338 | 237.17 | 248.08 | 66.8% | 27.93 |
| 2048 | 9,359.2 | 2,275,922 | 243.18 | 254.25 | 66.8% | 28.39 |
| 2049 | 9,419.8 | 2,357,505 | 250.27 | 261.64 | 66.8% | 28.94 |
| 2050 | 9,472.9 | 2,443,502 | 257.95 | 269.59 | 66.8% | 29.53 |
| 2051 | 9,526.0 | 2,539,161 | 266.55 | 278.59 | 66.8% | 30.19 |
| 2052 | 9,579.1 | 2,630,733 | 274.63 | 286.91 | 66.8% | 30.79 |
| 2053 | 9,632.2 | 2,724,489 | 282.85 | 295.55 | 66.8% | 31.41 |
| 2054 | 9,685.3 | 2,791,662 | 288.24 | 301.15 | 66.8% | 31.81 |
| 2055 | 9,738.4 | 2,862,200 | 293.91 | 307.10 | 66.8% | 32.23 |
| 2056 | 9,791.5 | 2,952,648 | 301.55 | 315.01 | 66.8% | 32.78 |
| 2057 | 9,844.6 | 3,068,232 | 311.67 | 325.60 | 66.8% | 33.52 |
| 2058 | 9,897.7 | 3,136,573 | 316.90 | 331.09 | 66.8% | 33.90 |
| 2059 | 9,950.8 | 3,206,200 | 322.21 | 336.67 | 66.8% | 34.28 |
| 2060 | 10,003.9 | 3,280,205 | 327.89 | 342.65 | 66.8% | 34.68 |
| 2061 | 10,057.0 | 3,356,523 | 333.75 | 348.82 | 66.8% | 35.10 |
| 2062 | 10,110.1 | 3,437,253 | 339.98 | 355.38 | 66.8% | 35.54 |
| 2063 | 10,163.2 | 3,575,899 | 351.85 | 367.61 | 66.8% | 36.36 |
| 2064 | 10,216.3 | 3,726,294 | 364.74 | 381.20 | 66.8% | 37.26 |
| 2065 | 10,269.4 | 3,828,348 | 372.79 | 389.68 | 66.8% | 37.81 |
| 2066 | 10,322.5 | 3,951,427 | 382.80 | 400.08 | 66.8% | 38.49 |
| 2067 | 10,375.5 | 4,115,386 | 396.64 | 414.52 | 66.8% | 39.41 |

See accompanying notes.

Notes:

1. Energy delivered by Hydro at the transmission level represents Hydro's wholesale delivery requirement for the Island Interconnected System. Starting in 2014, it is derived by subtracting customer-based generation and transmission losses from Total Island Load as per 2010 PLF (Exhibit 1). Prior to 2014, it is derived from the short-term operating load forecast.
2. Hydro's Island Interconnected revenue requirement represents existing rate base plus incremental generation expansion costs as per the isolated or Muskrat Falls - LIL alternatives. See Pub-Nalcor-3 and Pub-Nalcor-4.
3. Hydro's Island Interconnected wholesale rate is derived by dividing the revenue requirement by energy delivered at the transmission level. This \$ per MWh illustrates the general electricity rate trends for costs on the Island under the alternative electricity supply futures.
4. The projected wholesale rate to Newfoundland Power is a function of Newfoundland Power's share of Hydro's total revenue requirement based on energy, demand and Rural deficit allocations, divided through by the Newfoundland Power's energy purchases from Hydro. It is intended to be a general estimate of the trend in the all-in wholesale average energy charge.
5. Hydro has estimated the impact of changes in its Island Interconnected revenue requirements on retail rates by assuming that the percentage pass through of Hydro costs applicable across Newfoundland Power in 2010 remains relevant in future periods. The starting retail rate was as of July 1, 2010 for the overall average consumption level applicable for the Island Interconnected system, inclusive of taxes.