

1 **Q. Page 1-6, lines 10-22: Please describe in detail the extent to which Newfoundland**
2 **Power has been involved in discussions with Newfoundland Hydro and/or Nalcor**
3 **Energy and the Government of Newfoundland and Labrador regarding the**
4 **consequences for its customers of the recovery of costs of the Muskrat Falls Project,**
5 **including discussions, if any, on plans for rate mitigation.**

6
7 **A. A. Introduction**

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9 Newfoundland Power has had discussions with Newfoundland and Labrador Hydro
10 (“Hydro”), Nalcor Energy (“Nalcor”), and representatives of the Provincial Department
11 of Natural Resources (the “Government”) regarding the consequences for Newfoundland
12 Power’s customers associated with the costs of the Muskrat Falls Project. Since 2017,
13 this included matters associated with rate mitigation.

14
15 Newfoundland Power’s primary interest in these discussions is to better understand the
16 outlook for its customers’ rates. Customers have indicated that they want to know what
17 future rates will look like and what the timing of any increases might be. Newfoundland
18 Power does not believe that setting electricity rates to attempt recovery of *all* Muskrat
19 Falls Project costs from customers on the island of Newfoundland would be reasonable.

20
21 The remainder of this response to Request for Information PUB-NP-012 outlines the
22 context, content and status of these discussions.

23
24 **B. Context**

25
26 ***The Development of the Muskrat Falls Project***

27 The development of a lower Churchill River hydroelectric project and transmission link
28 with the island of Newfoundland was outlined in the Government’s 2007 *Energy Plan*.¹
29 The specific Muskrat Falls Project was announced in November 2010.² In September
30 2011, estimates associated with the Muskrat Falls Project indicated construction costs of
31 approximately \$5 billion.³

32
33 In June 2011, the Government issued a reference to the Board pursuant to Section 5 of
34 the *Electrical Power Control Act, 1994* to review whether the Muskrat Falls Project
35 represented the least-cost option for supply of power to the island of Newfoundland when
36 compared to an isolated island development scenario.⁴ In March 2012, the Board

¹ See the Government’s 2007 *Energy Plan, Section 4: Electricity*, page 32 *et. seq.*

² See the November 18, 2010 Government press release *Lower Churchill Project to Become a Reality; Province Signs Partnership Agreement with Emera Inc. for Development of Muskrat Falls*.

³ See Navigant’s *Independent Supply Decision Review, September 14, 2011, Table 6: Summary of Muskrat Falls and Labrador-Island Link Capital Cost Estimate*, page 41. The table shows (i) total capital costs associated with the Muskrat Falls Generating Facility to be \$2.9 billion and (ii) total capital costs associated with the Labrador-Island Transmission Link to be \$2.1 billion. The total capital cost is \$5 billion (\$2.9 billion + \$2.1 billion). This does not include financing costs or any costs associated with the Maritime Link.

⁴ See the June 17, 2011 Government press release *Public Utilities Board to Review Lower Churchill Project*.

1 concluded that the information provided by Nalcor in the review was not detailed,
2 complete or current enough to determine whether, in effect, the Muskrat Falls Project was
3 the least-cost option of the two scenarios.⁵
4

5 In December 2012, the Government sanctioned the Muskrat Falls Project at a total
6 estimated cost of \$7.4 billion.⁶ Legislative amendments following Government sanction
7 granted Hydro the exclusive right to sell electrical power or energy to Newfoundland
8 Power and industrial customers on the island of Newfoundland. Orders in Council
9 effectively exempt the Muskrat Falls Project from the Board’s oversight under the
10 *Electrical Power Control Act, 1994* and the *Public Utilities Act* and required the Board to
11 approve recovery of *all* Muskrat Falls Project costs from customers on the island of
12 Newfoundland.⁷
13

14 By a series of updates commencing in June 2014, the total estimated cost of the Muskrat
15 Falls Project was revised by Nalcor.⁸ By June 2017, the estimated cost had increased to
16 \$12.7 billion. This was over \$5 billion more than the original sanctioned cost of \$7.4
17 billion.⁹ In June 2017, it was also announced that the forecast of annual operating costs
18 of the Muskrat Falls Project had tripled from \$34 million to \$109 million.¹⁰
19

20 ***Customer Rate Implications***

21 In August 2011, the Joint Review Panel indicated that the cost of electricity upon
22 completion of the Muskrat Falls Project would be approximately 14.3¢/kWh.¹¹ In
23 September 2011, Nalcor released an independent supply decision review of the Muskrat
24 Falls Project. The rate impact analysis included with this review indicated, in effect, that
25 following commissioning of the Muskrat Falls Project, wholesale electricity rates for the
26 island of Newfoundland would decline in real terms.¹²

⁵ See the Board’s *Report to Government, March 30, 2012*, page iv.

⁶ For the sanction of the Muskrat Falls Project, see the December 17, 2012 Government press release *Government of Newfoundland and Labrador Announces Sanction of the Muskrat Falls Development*. For the total estimate at sanction of \$7.4 billion, see Nalcor’s *Muskrat Falls Project Update, June 23, 2017*, slide 10. The \$7.4 billion includes (i) \$6.2 billion in capital costs associated with the Muskrat Falls generating facility and Labrador transmission assets and (ii) \$1.2 billion in financing costs.

⁷ See the *Muskrat Falls Project Exemption Order under the Electrical Power Control Act, 1994 and the Public Utilities Act (O.C. 2013-342)*, filed November 29, 2013.

⁸ On June 24, 2014, Nalcor updated its capital cost estimate to \$7.0 billion, an increase of \$0.8 billion from the sanction capital cost estimate of \$6.2 billion. On September 29, 2015 Nalcor further revised its capital cost estimate to \$7.65 billion. On June 24, 2016 Nalcor provided a total Muskrat Falls Project cost update. The total cost of the project increased to \$11.4 billion which included (i) \$9.1 billion in capital costs and (ii) \$2.3 billion in financing costs. Nalcor provided its most recent update on June 24, 2017. The update provided total costs of \$12.7 billion which included (i) \$10.1 billion in capital costs and (ii) \$2.6 billion in financing costs.

⁹ See Nalcor’s *Muskrat Falls Project Update, June 23, 2017* presentation, slide 10.

¹⁰ See Nalcor’s *Muskrat Falls Project Update, June 23, 2017* presentation, slide 14.

¹¹ See *Report of the Joint Review Panel: Lower Churchill Hydroelectric Generation Project Nalcor Energy Newfoundland and Labrador, August 2011*, page 19.

¹² See Navigant’s *Independent Supply Decision Review, September 14, 2011, Figure 26: Average Revenue Requirement of the Interconnected Island Alternative*, page 69.

1 In November 2012, immediately prior to sanction of the Muskrat Falls Project,
2 Government indicated that from 2016 to 2030 electricity rates for the average rate payer
3 would increase by 18%, or approximately \$38 per month.¹³ At the time of sanction in
4 December 2012, Nalcor projected average customer rates in 2021 of approximately
5 15.1¢/kWh.¹⁴

6
7 From 2014 to 2017, increases in Muskrat Falls Project costs resulted in a dramatic
8 increase in the estimated customer rate impacts associated with the project. By June
9 2017, Nalcor estimated that average customer rates following commissioning of the
10 Muskrat Falls Project would be approximately 22.9¢/kWh.¹⁵

11
12 This increased estimate has led to a greater focus on assessing what might be done to
13 mitigate customer rate impacts associated with the project. Government has indicated
14 that it intends to limit residential rates to approximately 17¢/kWh.¹⁶

15 16 **C. Rate Mitigation**

17 18 *Discussions to Date*

19 The Government has publicly indicated that it is preparing plans for rate mitigation.

20
21 Newfoundland Power has had discussions with Government concerning the impact upon
22 its customers of recovering Muskrat Falls Project costs in electricity rates. Potential rate
23 mitigation options have been part of these discussions; however, to date the consideration
24 of options has been general in nature.

25
26 Newfoundland Power has also discussed rate mitigation with Nalcor. Nalcor has
27 indicated that rate mitigation is a public policy prerogative of Government; and Nalcor's
28 role is to provide Government with options.

29
30 Newfoundland Power has also discussed rate mitigation with Hydro. These discussions
31 have generally focused on regulatory options supporting mitigation. This includes the
32 proposal contained in Hydro's *2017 General Rate Application* for the Off-Island
33 Purchases Deferral Account and the constraints presented by the legislative and
34 regulatory framework governing the Muskrat Falls Project.

35 36 *Potential Rate Mitigation Options*

37 The following is a non-exhaustive list of potential rate mitigation options. They are
38 conceptual in nature. Some, such as the crediting of electricity export revenue against

¹³ See the *Key Findings* section of the Government's report *Electricity Rates Forecasting: Muskrat Falls Will Stabilize Rates for Consumers, November 2012*.

¹⁴ See Nalcor's *Muskrat Falls Project Update, June 23, 2017* presentation, slide 19.

¹⁵ See Nalcor's *Muskrat Falls Project Update, June 23, 2017* presentation, slide 19.

¹⁶ See The July 28, 2017 Telegram article which provides "...Premier Dwight Ball said his government's mission is to make sure rates don't go much above 17 cents per kWh when Muskrat Falls is fully online in 2021...". At the time, the all-in residential rate (including the basic customer charge) was approximately 11.7¢/kWh.

1 customer rates, have already arisen publically.¹⁷ The specific impact of each option upon
2 future customer rates has not been analyzed by Newfoundland Power. Similarly, the
3 potential customer rate impacts of these options have not been discussed by
4 Newfoundland Power with the Government, Nalcor or Hydro.

5
6 *Delay, Defer, or Limit Muskrat Falls Project Cost Recovery:* Muskrat Falls Project costs
7 and operating costs are significantly higher than estimated. Currently, the legislative and
8 regulatory framework governing the Muskrat Falls Project requires *all* project costs to be
9 recovered from customers on the island of Newfoundland. Delaying, deferring, and/or
10 limiting the extent of Muskrat Falls Project costs to be recovered in island customers'
11 rates will mitigate the impact of the Muskrat Falls Project costs on those rates.¹⁸

12
13 *Credit Nalcor Electricity Export Revenue Against Customer Rates:* Currently, revenue
14 from power exports associated with the Muskrat Falls Project is not applied against the
15 Muskrat Falls Project costs to be recovered in island customers' rates. Applying the net
16 Nalcor export revenue against customer rates will mitigate the impact of the Muskrat
17 Falls Project costs on those rates.

18
19 *Develop New Electricity Markets Within the Province:* Upon commissioning of the
20 Muskrat Falls Project there will be a large surplus of available energy in the province.
21 By developing new electricity markets within the province, the opportunity exists to
22 mitigate the impact of the Muskrat Falls Project costs on existing island customers' rates.

23
24 *Credit Former Nalcor Oil Revenues Against Customer Rates:* As Nalcor was developing
25 the Muskrat Falls Project, it was also investing in a number of oil developments in the
26 provincial offshore. These oil developments may yield returns for the Government.¹⁹
27 Applying these returns against customers' rates will mitigate the impact of Muskrat Falls
28 Project costs on those rates.

¹⁷ For example, on June 24, 2014 following the Muskrat Falls cost update, then Premier Tom Marshall stated:
“The ratepayers of the province have always been the primary focus for this government in pursuing the
Muskrat Falls Project. Our government has recognized that when first power comes from the project and rates
are affected, the government at the time would decide what to do with the return coming from the project. We
maintain that position. If first power were flowing today, our government would use money from the project’s
revenue streams to offset the increases in electricity rates over and above what we anticipated at sanction. We
have remained committed to doing what is in the best interest of ratepayers.”

¹⁸ In response to an *Access to Information and Protection of Privacy Act* question dated January 13, 2016, Nalcor
provided tables which showed projected revenue requirements associated with the Muskrat Falls Project for 50
years following commissioning of the project. Nalcor indicated that “...the content all of the tables provided
represents the information that was available and used in the estimated rates published by Nalcor on the
Muskrat Falls website in November 2015.” From the response, it appears the Muskrat Falls assets were
depreciated over 50 years. The response also indicated the return on equity on the Labrador-Island Link
(“LIL”) is in excess of \$100 million through the first 7 years after commissioning. If (i) the service life of the
assets were extended and/or (ii) the return on equity on the LIL was reduced, it would lower the revenue
requirement in the initial years after commissioning of the Muskrat Falls project.

¹⁹ For example, on July 26, 2018, the Government announced the finalization of a framework agreement for the
development of the Bay du Nord Project. In the press release, it was stated that the project would provide an
estimated \$3.5 billion in government revenues.

Other Considerations Affecting Customer Rate Mitigation

Three additional considerations will affect the development of a customer rate mitigation plan associated with the Muskrat Falls Project. One consideration relates to the timing of customer rate increases and the potential for rate shock. The second relates to the potential effect of rate increases on customer usage. The final consideration concerns the existing legislative and regulatory framework governing the Muskrat Falls Project.

Currently, Newfoundland Power’s average residential customer electricity cost is approximately 12.4¢/kWh.²⁰ An increase of 4.6¢/kWh to the 17¢/kWh limit suggested publically by the Government represents an approximate 37% increase from current customer rates.²¹ The implementation of a 37% increase in customer rates implies that a series of rate changes over a multi-year period would be required to avoid rate shock.²²

Changes in energy prices have an impact on customer usage. As a general proposition, as electricity rates increase, energy usage will decrease.²³ The substantial potential increase in electricity rates associated with the Muskrat Falls Project are exceptional by historical standards. This makes estimation of elasticity impacts associated with the Muskrat Falls Project particularly complex and uncertain.

The existing legislative and regulatory framework governing the Muskrat Falls Project effectively requires the Board, upon commissioning of the project, to approve recovery of all Muskrat Falls Project costs from customers on the island of Newfoundland. This presents a significant potential limitation to rate mitigation options. Modification of this framework may be required to permit implementation of effective rate mitigation.

D. Concluding

The costs associated with the Muskrat Falls Project have increased substantially from the project’s initial conception and ultimate sanction in 2012. These increased costs have dramatically increased the estimated customer rate impacts associated with the Muskrat Falls Project.

²⁰ All-residential rate, effective July 1, 2018. It reflects (i) the energy rate of 11.391¢/kWh and (ii) the basic customer charge expressed in kWh based on average consumption.

²¹ 4.6/12.4 = 37%.

²² For example, in Order No. P.U. 14 (2017), the Board noted concern of rate shock associated with Hydro’s proposed July 1, 2017 rate increase. On page 16/17 of the Order, the Board states “*The annual rate impacts for retail customers associated with the operation of the RSP have historically been the range of +/-10 %, however, the estimated impact in July 2017 is much larger, with an estimated rate increase for retail customers in the order of 18-19%. The Board is very concerned about increases of this magnitude which are well outside of the normal range. The Board acknowledges that the estimated rate increase is a result of the normal operation of the RSP and that the last two annual RSP adjustments resulted in material decreases. However, the estimated rate increase for July 2017 is such a significant increase that it may be argued that it would cause rate shock, despite the earlier rate decreases.*”

²³ See the response to Request for Information CA-NP-057 which shows that, generally, a 1% increase in the price of electricity will result in a 0.21% decrease in energy sales.

1 Newfoundland Power’s customers will ultimately bear a significant portion of the costs
2 associated with the Muskrat Falls Project. Customers tell Newfoundland Power that they
3 are very concerned about how this will affect the future rates they will have to pay for
4 electricity. The potential magnitude of those costs indicates that there is merit in a full
5 and thorough consideration of the options available to mitigate customer rate impacts.
6
7 The Government has indicated that it is preparing plans for rate mitigation. To date,
8 Newfoundland Power has had discussions with Government, Nalcor and Hydro
9 concerning rate mitigation and the Company looks forward to having the opportunity to
10 participate in further efforts along these lines.