(Application Volume 2, Electrification, Conservation and Demand Management 1 Q. Plan 2021-2025) It is stated (page 3) "based on a residential retail rate of 13.5¢/kWh 2 3 and an export sales value of 4.2¢/kWh, each additional kWh consumed domestically will provide a benefit of 9.3¢." 4 5 What is the basis for assuming a residential retail rate of 13.5 cents/kWh? 6 What is the basis for assuming an export sales value of 4.2 cents/kWh? How b) 7 does this compare to Nalcor Energy export sales prices in recent history? 8 Does this figure incorporate transmission costs? If so, please provide the 9 transmission costs. If not, why not? From whose perspective is this benefit derived? If the Government provides 10 c) rate mitigation bringing rates down to 13.5 cents/kWh post Muskrat Falls 11 commissioning, 12 who benefits from electrification, Government consumers? 13 14 15 Projected incremental revenues used in the Net Present Value ("NPV") analysis A. a) 16 of customer electrification programs are based on the customer rates approved by the Board in Order No. P.U. 31 (2019) and annual inflationary increases in 17 electricity rates of 2.25%. For example, the customer electricity rates assumed in 18 the NPV analysis would result in an "all-in" residential rate of approximately 19 13.5 ¢/kWh in 2021.² The assumption for forecast electricity rates used in the 20 NPV analysis reflects the Provincial Government's rate mitigation framework 21 announced in 2019.³ 22 23 24 The basis for assuming an export sales value of 4.2¢ per kWh was the 2021 b) 25 marginal cost projection provided by Newfoundland and Labrador Hydro ("Hydro") in April 2020. 26 27 28 As part of Newfoundland Power's 2022 Capital Budget Application, Hydro 29 indicated that Nalcor Energy Marketing's realized electricity price for export sales 30 was \$23 per MWh, or 2.3¢ per kWh, in 2020.⁴ 31 32

33 34 According to Hydro's Marginal Cost Study, marginal costs for Hydro's Island Interconnected System include transmission line charges to deliver electricity to export markets as well as Hydro's transmission line losses.⁵

See the 2021 Electrification, Conservation and Demand Management Application, Volume 1, Exhibit 2, Appendix A, Column C.

In addition to the monthly energy charge, an "all-in" residential rate also considers the monthly basic customer charge, expressed in ¢/kWh.

See page 8 of the Provincial Government's April 2019 release Protecting You From the Cost Impacts of Muskrat Falls.

See Request for Information NLH-NP-015 filed in relation to Newfoundland Power's 2022 Capital Budget Application.

See the *Marginal Cost Study*, *Appendix A – Marginal Cost Study Update – 2018* prepared by Christensen Associates Energy Consulting, page 16.

1	c)	The electrification programs included in the <i>Electrification</i> , <i>Conservation and</i>
2		Demand Management Plan: 2021-2025 will provide rate mitigating benefits for
3		customers.
4		
5		On July 28, 2021, the Provincial Government and the Federal Government
6		announced an agreement-in-principle to mitigate rate impacts associated with the
7		Muskrat Falls Project. The mitigated customer rate target was updated to
8		14.7 ¢/kWh, or approximately 9% higher than the previously indicated target of
9		13.5 ¢/kWh. ⁶
10		
11		If actual electricity rates were higher than the level assumed in the NPV analysis
12		incremental revenues, and, thus, customer rate mitigation benefits would be
13		higher. For example, if the NPV analysis assumed customer electricity rates
14		increased by 9% in 2022, it would result in additional net revenues of
15		approximately \$35 million to \$40 million over the 2021 to 2034 period, or
16		approximately \$20 million on an NPV basis. The higher net revenues would
17		increase the estimated customer rate mitigation benefit to approximately
18		0.65 g/kWh by 2034, or about $0.15 g/kWh$ higher than the current estimate of
19		$0.5 \text{¢/kWh by } 2034.^7$

 $^{^6 \}qquad 14.7 \div 13.5 - 1 = 0.089,$ or approximately 9% .

For an illustration of the impact, see response to Request for Information PUB-NP-065 filed as part of Newfoundland Power's 2021 Electrification, Conservation and Demand Management Application.