

1 **Q. (2021 Electrification, Conservation and Demand Management Application, Volume**
2 **1, Exhibit 2, Appendix A) Note C states “The revenue figures are based on a change**
3 **from the rates approved by the Board in Order No. P.U. 31 (2019) Amended and**
4 **annual increases in electricity rates of 2.25%.”**

5 **(a) What are the actual rates assumed in each year of the analysis?**

6 **(b) What is the basis for assuming these rates and the annual rate increases of**
7 **2.25%?**

8 **(c) What are the expected rates in each year of the analysis if the Application is**
9 **approved by the Board? Please show the expected impacts of each component of**
10 **the program included in the Application.**

11 **(d) Will the rate mitigation impacts that derive from the proposals in the**
12 **Application benefit ratepayers or the Government?**

13
14 **A. (a)** Attachment A to this response provides the electricity rate assumptions used in the
15 net present value (“NPV”) analysis.¹

16
17 (b) See the response to Request for Information PUB-NP-022.

18
19 (c) Attachment B to this response provides *pro forma* electricity rates based on: (i) the
20 electricity rate assumptions used in the NPV analysis;² and (ii) the *pro forma* annual
21 rate mitigating impacts of Newfoundland Power’s customer electrification initiatives
22 over the period 2021 to 2034.³

23
24 Attachment C provides *pro forma* annual rate mitigating impacts of Newfoundland
25 Power’s residential and commercial customer electrification initiatives over the
26 period 2021 to 2034.⁴

27
28 (d) The electrification initiatives included in the 2021 Plan will provide rate mitigating
29 benefits to ratepayers. For example, increased electrification is forecast to provide
30 0.5¢/kWh of rate mitigating benefits to customers by 2034.⁵ This is the result of
31 additional net revenue of approximately \$123 million over the period 2021 to 2034,
32 or \$62 million on an NPV basis.

33
34 The Provincial Government has provided a letter of support for the 2021 Plan. See
35 the *2021 Electrification, Conservation and Demand Management Application*,
36 Volume 2, Schedule M.

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

² See Attachment A to this response.

³ See the response to Request for Information PUB-NP-009.

⁴ The electrification initiatives, and associated incremental sales estimates, set out in the *Electrification, Conservation and Demand Management Plan: 2021-2025* (the “2021 Plan”) are interdependent. As a result, rate impacts by each component of the residential and commercial initiatives of the 2021 Plan cannot be reasonably determined. For example, residential vehicle purchase incentives will not be effective without sufficient public charging infrastructure in place to remove the barrier of range anxiety and charger accessibility.

⁵ For a fulsome discussion on the customer benefits resulting from electrification, see the *2021 Electrification, Conservation and Demand Management Application*, Volume 1, Exhibit 2, Section 2.2.

***Pro Forma Revenue Requirement Analysis
Electricity Rates Assumptions***

Pro Forma Revenue Requirement Analysis¹
Electricity Rates Assumptions
2021 to 2034 Forecast

Table 1 provides the energy rates assumed in each year to calculate Incremental Revenues (Column C). General Service (“GS”) energy rates shown are second block energy rates.

Table 1
Energy Rates Assumptions
2021-2034
(\$/kWh)

Year	Residential	GS Rate 2.1	GS Rate 2.3	GS Rate 2.4
2021	0.12478	0.09278	0.08479	0.08396
2022	0.12758	0.09487	0.08669	0.08585
2023	0.13045	0.09700	0.08864	0.08778
2024	0.13339	0.09919	0.09064	0.08975
2025	0.13639	0.10142	0.09268	0.09177
2026	0.13946	0.10370	0.09476	0.09384
2027	0.14260	0.10603	0.09690	0.09595
2028	0.14581	0.10842	0.09908	0.09811
2029	0.14909	0.11086	0.10131	0.10032
2030	0.15244	0.11335	0.10358	0.10257
2031	0.15587	0.11590	0.10592	0.10488
2032	0.15938	0.11851	0.10830	0.10724
2033	0.16296	0.12118	0.11073	0.10965
2034	0.16663	0.12390	0.11323	0.11212

Table 2 provides the demand rates assumed in each year to calculate Incremental Revenues (Column C).

Table 2
Demand Rates Assumptions
2021-2034
(\$/kW)

Year	<u>GS Rate 2.1</u>		<u>GS Rate 2.3</u>		<u>GS Rate 2.4</u>	
	Dec-Mar	Apr-Nov	Dec-Mar	Apr-Nov	Dec-Mar	Apr-Nov
2021	10.01	7.45	8.39	5.84	8.06	5.50
2022	10.24	7.62	8.58	5.97	8.24	5.62
2023	10.47	7.79	8.78	6.10	8.42	5.75
2024	10.70	7.97	8.97	6.24	8.61	5.88
2025	10.94	8.15	9.18	6.38	8.81	6.01
2026	11.19	8.33	9.38	6.53	9.01	6.15
2027	11.44	8.52	9.59	6.67	9.21	6.29
2028	11.70	8.71	9.81	6.82	9.42	6.43
2029	11.96	8.91	10.03	6.98	9.63	6.57
2030	12.23	9.11	10.26	7.13	9.84	6.72
2031	12.50	9.31	10.49	7.29	10.07	6.87
2032	12.79	9.52	10.72	7.46	10.29	7.03
2033	13.07	9.74	10.96	7.63	10.52	7.18
2034	13.37	9.95	11.21	7.80	10.76	7.35

¹ See the Application, Volume 1, Exhibit 2, Appendix A.

***Pro Forma Electricity Rates Analysis
(Based on the Requested Scenario)***

Pro Forma Electricity Rates Analysis¹
(Based on the Requested Scenario)²
2021 to 2034 Forecast

Table 1 provides the *pro forma* energy rates in each year based on the requested scenario.

Table 1
Energy Rates Assumptions
2021-2034
(\$/kWh)

Year	Residential	GS Rate 2.1	GS Rate 2.3	GS Rate 2.4
2021	0.12478	0.09278	0.08479	0.08396
2022	0.12771	0.09496	0.08678	0.08594
2023	0.13058	0.09710	0.08873	0.08787
2024	0.13352	0.09929	0.09073	0.08984
2025	0.13653	0.10152	0.09277	0.09186
2026	0.13946	0.10370	0.09476	0.09384
2027	0.14217	0.10571	0.09661	0.09566
2028	0.14494	0.10777	0.09849	0.09752
2029	0.14790	0.10997	0.10050	0.09952
2030	0.15061	0.11199	0.10234	0.10134
2031	0.15338	0.11405	0.10423	0.10320
2032	0.15619	0.11614	0.10613	0.10510
2033	0.15889	0.11815	0.10796	0.10691
2034	0.16163	0.12018	0.10983	0.10876

Table 2 provides the *pro forma* demand rates in each year based on the requested scenario.

Table 2
Demand Rates Assumptions
2021-2034
(\$/kW)

Year	GS Rate 2.1		GS Rate 2.3		GS Rate 2.4	
	Dec-Mar	Apr-Nov	Dec-Mar	Apr-Nov	Dec-Mar	Apr-Nov
2021	10.01	7.45	8.39	5.84	8.06	5.50
2022	10.25	7.63	8.59	5.98	8.25	5.63
2023	10.48	7.80	8.79	6.11	8.43	5.76
2024	10.71	7.98	8.98	6.25	8.62	5.89
2025	10.95	8.16	9.19	6.39	8.82	6.02
2026	11.19	8.33	9.38	6.53	9.01	6.15
2027	11.41	8.49	9.56	6.65	9.18	6.27
2028	11.63	8.66	9.75	6.78	9.36	6.39
2029	11.86	8.84	9.95	6.92	9.55	6.52
2030	12.08	9.00	10.14	7.04	9.72	6.64
2031	12.30	9.16	10.32	7.17	9.91	6.76
2032	12.53	9.33	10.51	7.31	10.08	6.89
2033	12.74	9.50	10.69	7.44	10.26	7.00
2034	12.97	9.65	10.87	7.57	10.44	7.13

¹ Based on (i) the electricity rate assumptions used in the NPV analysis and (ii) the pro forma annual customer rate impacts of Newfoundland Power's customer electrification initiatives over the period 2021 to 2034.

² See the Request for Information CA-NP-026, part (c).

***Pro Forma Annual Rate Mitigating Impact Analysis
(Based on the Requested Scenario)***

Pro Forma Annual Rate Mitigating Impact Analysis
(Based on the Requested Scenario)¹
2021 to 2034 Forecast

Table 1 provides *pro forma* annual rate mitigating impacts of Newfoundland Power’s residential and commercial customer electrification initiatives over the period 2021 to 2034, based on the requested scenario.

Table 1
***Pro Forma* Rate Mitigation Impact Analysis**
2021-2034
(¢/kWh)

Year	Residential Initiatives¹	Commercial Initiatives²
2021	(0.002)	(0.000)
2022	(0.007)	(0.002)
2023	(0.011)	(0.005)
2024	(0.012)	(0.008)
2025	(0.010)	(0.008)
2026	0.007	(0.005)
2027	0.037	0.005
2028	0.071	0.016
2029	0.105	0.027
2030	0.147	0.045
2031	0.195	0.066
2032	0.247	0.093
2033	0.301	0.125
2034	0.360	0.160