

1 **Q. Reference slide 19**

2 Regarding Electricity Supply Costs:

3 (a) Is the cost figure of \$8,045,129 based on the marginal production cost (i.e., all-in marginal
4 cost including generation, transmission and distribution), on the export price or on some
5 other unit cost?

6 (b) Please provide a tabular calculation of the \$8,045,129 figure showing the annual quantity of
7 electricity and corresponding annual electricity supply cost.

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10 *A. This Request for Information relates to the Electrification, Conservation and Demand*
11 *Management Plan 2021–2025 (“2021 Plan”) developed in partnership by Newfoundland and*
12 *Labrador Hydro (“Hydro”) and Newfoundland Power Inc. (“Newfoundland Power”) (collectively,*
13 *the “Utilities”) and the related Technical Conference presented by the Utilities on February 1,*
14 *2022. Accordingly, the response reflects collaboration between the Utilities.*

15 (a) The cost figure of \$8,045,129 referenced in this Request for Information is based on the
16 marginal production cost including energy and capacity costs. The marginal cost of energy is
17 equivalent to the forecast export energy price.

18 (b) TC-CA-NLH-024, Attachment 1 provides the annual quantity of electricity and peak
19 demand and annual marginal electricity supply costs. The calculation of \$8,045,129 is
20 computed on a net present value basis.¹

21 TC-CA-NLH-024, Attachment 2 provides the calculation of the electricity supply costs for the
22 Residential Electric Vehicle & Charging Infrastructure Program.

¹ The calculation uses a 6% discount rate.

Attachment 1

Residential Electric Vehicle & Charger Infrastructure Program Impacts and Marginal Costs

Year	Winter On-Peak Energy (kWh)		Winter Off-Peak Energy (kWh)		Non-Winter Energy (kWh)	Peak Demand Impact (kW)	Winter On-Peak Energy Marginal Cost (\$/kWh)		Winter Off-Peak Energy Marginal Cost (\$/kWh)		Non-Winter Energy Marginal Cost (\$/kWh)	Capacity Marginal Cost (\$/kW)
	A	B	C	D			E	F	G	H		
2021	65,167	65,167	130,334	18	130,334	18	0.078	0.078	0.064	0.064	0.027	326.26
2022	366,176	366,176	732,353	97	732,353	97	0.079	0.079	0.064	0.064	0.029	333.46
2023	1,047,049	1,047,049	2,094,098	269	2,094,098	269	0.070	0.070	0.056	0.056	0.026	340.90
2024	2,287,024	2,287,024	4,574,048	570	4,574,048	570	0.068	0.068	0.056	0.056	0.027	349.56
2025	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.067	0.067	0.056	0.056	0.029	357.53
2026	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.074	0.074	0.063	0.063	0.029	364.18
2027	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.077	0.077	0.066	0.066	0.030	371.67
2028	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.079	0.079	0.069	0.069	0.034	380.44
2029	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.083	0.083	0.072	0.072	0.039	390.08
2030	4,221,385	4,221,385	8,442,770	1,037	8,442,770	1,037	0.085	0.085	0.073	0.073	0.040	397.87
2031	4,156,218	4,156,218	8,312,436	1,019	8,312,436	1,019	0.087	0.087	0.075	0.075	0.041	405.82
2032	3,855,209	3,855,209	7,710,417	940	7,710,417	940	0.088	0.088	0.076	0.076	0.042	413.94
2033	3,174,336	3,174,336	6,348,672	768	6,348,672	768	0.090	0.090	0.078	0.078	0.043	422.21
2034	1,934,361	1,934,361	3,868,722	467	3,868,722	467	0.092	0.092	0.079	0.079	0.044	430.64

Attachment 2

**Annual Quantity of Electricity, Peak Demand and Supply Costs
 Residential Electric Vehicle & Charging Infrastructure Program**

Year	Total Energy (kWh)¹	Peak Demand (kW)²	Electricity Supply Costs (\$)³
2021	260,667	18	18,811
2022	1,464,705	97	105,705
2023	4,188,195	269	272,214
2024	9,148,095	570	607,160
2025	16,885,539	1,037	1,132,853
2026	16,885,539	1,037	1,206,448
2027	16,885,539	1,037	1,244,146
2028	16,885,539	1,037	1,306,853
2029	16,885,539	1,037	1,392,034
2030	16,885,539	1,037	1,419,911
2031	16,624,872	1,019	1,425,015
2032	15,420,834	940	1,364,116
2033	12,697,344	768	1,127,953
2034	7,737,444	467	700,714

¹ This column represents the sum of columns A, B and C in Attachment 1. Differences in the Total Energy column in Attachment 2 are due to rounding.

² Column D from Attachment 1.

³ This column represents (A x E) + (B x F) + (C x G) + (D x H) from Attachment 1. Differences in the Electricity Supply Costs column in Attachment 2 are due to rounding.