WHENEVER. WHEREVER. We'll be there.



December 20, 2024

Board of Commissioners of Public Utilities P.O. Box 21040 120 Torbay Road St. John's, NL A1A 5B2

Attention: Jo-Anne Galarneau Executive Director and Board Secretary

Dear Ms. Galarneau:

Re: Peer Group Performance Measures for Newfoundland Power

On February 28, 2005, Newfoundland Power submitted a report entitled *Peer Group Performance Measures for Newfoundland Power*. The report included Newfoundland Power's commitment to report annually on the measures presented therein until otherwise directed by the Board.

Enclosed is the 2023 *Peer Group Performance Measures for Newfoundland Power* report provided in fulfillment of that commitment.

Please direct any questions or concerns to the undersigned.

Yours truly,

Dominic Foley Legal Counsel

ec. Shirley Walsh Newfoundland and Labrador Hydro

> Dennis Browne, KC Browne Fitzgerald Morgan & Avis

Newfoundland Power Inc.

Peer Group Performance Measures for Newfoundland Power

December 20, 2024



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1.0 Introduction

In Order No. P.U. 19 (2003), the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board") ordered that Newfoundland Power Inc. ("Newfoundland Power" or the "Company") file with the Board a report suggesting a peer group of utilities and performance measures upon which to evaluate the Company's performance.

In 2004, the Company submitted a draft report entitled *A Report on Peer Group Performance Measures for Newfoundland Power* which reviewed the Company's initial findings in relation to utility performance measures and benchmarking initiatives. Subsequently, Newfoundland Power submitted a report entitled *A Supplementary Report on Peer Group Performance Measures for Newfoundland Power* addressing questions from the Board and recommending certain additional measures.

On February 28, 2005, the Company submitted a report entitled *Peer Group Performance Measures for Newfoundland Power* (the "February 2005 Report"), which provided comparative statistical data together with an assessment of the appropriateness of the recommended performance measures. The February 2005 Report included the Company's commitment to report annually on the measures presented until otherwise directed by the Board.

This report is provided in fulfillment of the Company's commitment to report annually on the measures presented in the February 2005 Report. Performance information is provided through 2023.

2.0 Performance Measures

This report provides a comparison of Newfoundland Power performance measures against the performance measures of a composite of Canadian and U.S. utilities.

2.1 Canadian Utility Measures

The following measures are presented for comparing the Company's performance against a composite of Canadian utilities:

- 1. System Average Interruption Frequency Index ("SAIFI");
- 2. System Average Interruption Duration Index ("SAIDI"); and
- 3. All Injury Frequency Rate (Injuries per 200,000 hours worked).

As with previous reports, the Canadian measures are based on data compiled by Electricity Canada ("EC"), formerly the Canadian Electricity Association. In particular, the report includes data from EC's *Annual Service Continuity Report on Distribution System Performance in Electrical Utilities* and *Safety Incident Statistics Reports*.

The number of composite performance measures available from EC for publication is limited. As of the date of this report, no cost-related EC composite indicators are available for use in the context of regulatory reporting of peer group performance measures.

Appendix A provides comparisons of the available Canadian utility composite measures and the equivalent Newfoundland Power data.

2.2 U.S. Utility Measures

The following measures are presented for comparing the Company's performance to a peer group of U.S. utilities:

- 1. Total Distribution Operating Expense per Customer;
- 2. Total Distribution Operating Expense per megawatt hour ("MWh");
- 3. Total Customer Service Expense per Customer;
- 4. Total Administration and Other Operating Expense per Total Operating Expense (excluding fuel and purchased power);
- 5. Total Operating Expense per Energy Sold (excluding fuel and purchased power); and
- 6. Total Operating Expense per Customer (excluding fuel and purchased power).

Appendix B contains comparisons of the composite measures for U.S. utilities and the equivalent Newfoundland Power data. The U.S. composite measures are based on data from 18 utilities. For each measure, the range of individual utility results is provided.

The U.S. measures are based on information filed by utilities with the Federal Energy Regulatory Commission ("FERC"). FERC requires major electric utilities under its jurisdiction to annually file prescribed information regarding their operations based on a FERC-defined system of accounts. These filings are publicly available.

The measures for the U.S. data are presented without any adjustment for exchange rates. With the significant shifting in exchange rates over time, converting U.S. dollar figures to Canadian values would distort cost trends.

Appendix C is a list of the U.S. utilities from which the composite measures in Appendix B were compiled.

3.0 Conclusion

Ongoing concerns with data availability and quality, coupled with observed differences in the operating profiles of participating utilities, make it difficult to draw meaningful conclusions regarding the Company's performance relative to other utilities.

Newfoundland Power maintains that year-over-year trending of the Company's own data is a more useful indication of performance than comparison with available data from other utilities.

Based on the measures presented in this report, Newfoundland Power offers the following conclusions:

- Newfoundland Power's reliability performance has fluctuated over the period 2014 to 2023. The fluctuations have been the result of a greater incidence of major system events. When the effect of major events is excluded, the Company's reliability performance has been relatively stable over the last decade.
- 2. Newfoundland Power's cost performance during the period from 2014 to 2023 indicates an overall stable trend.
- 3. Newfoundland Power's safety performance has improved since 2014.
- 4. Comparisons are subject to the limitations noted above; however, Newfoundland Power's performance generally compares favourably to that indicated by trends in the composite data for Canadian and U.S. utilities presented in this report.

Appendix A

Canadian Composite Comparisons

Appendix A

Canadian Composite Comparisons

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Vear	EC (Excluding Significant Events)	EC (Including Significant Events)	Newfoundland Power
2014	2.33	2.39	7.57
2015	2.21	2.32	3.37
2016	2.77	3.10	2.04
2017	2.05	2.61	3.69
2018	2.43	2.84	2.79
2019	2.38	2.65	2.14
2020	2.35	2.39	3.04
2021	2.28	2.42	3.48
2022	2.63	2.97	3.02
2023	2.77	3.09	3.11

SAIFI is a standard industry index representing the average number of interruptions per customers served per year.

The EC trend line reflects the composite performance of participating Canadian utilities (38 participants in 2023). The trend line shows that the frequency of service interruptions to customers has been relatively stable over the period 2014 to 2023.

The Newfoundland Power data reflects the impact of loss of supply events in January 2014, severe weather events in March and December of 2017, and Snowmaggedon in 2020. In 2021,

data was impacted by Hurricane Larry in September, loss of supply events and severe weather events in December. In 2022, data was impacted by severe weather events in January, more frequent high winds, loss of supply events, Hurricanes Earl and Fiona in September and underfrequency load shedding events related to testing on the Labrador-Island Link in November. In 2023, data was impacted by severe weather events and freezing rain in January and severe weather events, heavy rains and high winds in December.



System Average Interruption Duration Index (SAIDI)

Year	EC (Excluding Significant Events)	EC (Including Significant Events)	Newfoundland Power
2014	5.06	6.38	12.77
2015	3.88	5.08	3.26
2016	4.28	5.66	3.17
2017	4.98	7.55	7.09
2018	4.77	8.46	5.68
2019	5.01	8.38	4.02
2020	4.87	5.35	5.56
2021	4.50	5.57	6.24
2022	8.33	14.32	4.32
2023	5.88	10.08	3.91

SAIDI is a standard industry index representing the average interruption duration per customer served per year.

The EC trend line reflects the composite performance of participating Canadian utilities (38 participants in 2023). The trend lines show significant variability year-over-year. These fluctuations are principally due to the inclusion of outages caused by significant weather events. When significant events are excluded, there is a relatively stable trend line for the EC composite.

The anomalous results evident in the "EC (including Significant Events)" trend line reflect storms in Ontario in 2017, 2018, 2022 and 2023, storms in Quebec in 2017, 2018, 2022 and 2023, and storms in Atlantic Canada in 2019, 2022 and 2023.

The Newfoundland Power data reflects the impact of loss of supply events in January 2014, severe weather events in March and December of 2017, and Snowmaggedon in 2020. In 2021, data was impacted by Hurricane Larry in September, loss of supply events and severe weather events in December. In 2022, data was impacted by severe weather events in January, more frequent high winds, loss of supply events, Hurricanes Earl and Fiona in September and underfrequency load shedding events related to testing on the Labrador-Island Link in November. In 2023, data was impacted by severe weather events and freezing rain in January and severe weather events, heavy rains and high winds in December.



All Injury Frequency Rate (Injuries per 200,000 hours worked)

Voor	EC Composito	Newfoundland
rear	Composite	rower
2014	0.99	1.18
2015	0.79	0.53
2016	1.31	1.26
2017	0.77	0.73
2018	0.81	0.91
2019	0.51	0.37
2020	0.61	0.74
2021	0.62	0.56
2022	0.61	0.73
2023	0.62	0.17

All-injury Frequency Rate represents the rate of disabling injuries and medical-aid injuries per 200,000 exposure hours (hours worked).

The EC data is a composite of 10 participating Canadian utilities. The EC and Newfoundland Power trend lines show comparable levels of improvement from 2014 through 2022. In 2023, the injury frequency rate of 0.17 was the best on record in the Company's history.

Appendix B

U.S. Peer Group Composite Comparisons

Appendix B

U.S. Peer Group Composite Comparisons

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U.S. Peer Group Composite	Newfoundland Power
158.3	86.6
162.9	80.2
174.3	80.3
181.0	85.6
215.1	81.9
199.6	78.0
222.2	82.7
194.5	73.6
192.9	78.5
206.3	74.0
	U.S. Peer Group Composite 158.3 162.9 174.3 181.0 215.1 199.6 222.2 194.5 192.9 206.3

Total Distribution Operating Expense per Customer represents the total cost of operating and maintenance for the distribution function, as defined under the FERC code of accounts, expressed on a per customer account basis and adjusted for inflation. It measures the total direct cost of operating labour and materials, excluding allocated corporate shared services, involved in the operation and maintenance of the distribution portion of the electrical system, expressed on a per customer basis.¹

¹ The distribution system is the portion of the electrical system that links the transmission system to customer facilities.

While the numbers fluctuate, the U.S. utility data shows the distribution operating cost per customer to be generally increasing over time. The U.S. utilities' individual 2023 measures range from approximately \$79 to approximately \$348 per customer.

The graph shows a stable trend for Newfoundland Power over the reporting period.



U.S. Peer Group (\$ US) - • Newfoundland Power (\$ Can)

Year	U.S. Peer Group Composite	Newfoundland Power
2014	7.70	3.80
2015	7.89	3.53
2016	8.51	3.57
2017	9.03	3.85
2018	10.32	3.77
2019	9.71	3.59
2020	11.15	3.78
2021	11.18	3.50
2022	10.89	3.72
2023	12.11	3.44

Total Distribution Operating Expense per MWh represents the total cost of operating and maintenance for the distribution function, as defined under the FERC code of accounts, expressed on a per MWh of retail sales basis and adjusted for inflation. It measures the total direct cost of operating labour and materials, excluding allocated corporate shared services, involved in the operation and maintenance of the distribution portion of the electrical system, expressed on a per MWh basis.

The MWh of retail sales includes the total MWh sales of electricity as per retail rate schedules. It does not include sales for resale such as those to other distribution companies and retailers, nor energy interchanged through the power system (usually through transmission facilities).

There is an increasing trend in the U.S. peer group over the reporting period. The U.S. utilities' individual 2023 measures range from approximately \$3 to approximately \$39 per MWh.

The graph shows a stable trend for Newfoundland Power over the reporting period.



Year	U.S. Peer Group Composite	Newfoundland Power
2014	180.0	84.6
2015	194.3	77.7
2016	183.7	85.2
2017	169.5	79.4
2018	159.8	75.7
2019	150.4	77.5
2020	161.7	68.6
2021	143.7	59.6
2022	152.6	62.0
2023	156.8	64.0

Total Customer Service Expense per Customer represents the total cost of operating and maintenance for the customer accounting and customer service functions, as defined under the FERC code of accounts, expressed on a per customer account basis and adjusted for inflation. It measures the total direct cost of operating labour and materials, excluding allocated corporate shared services, associated with the management of customer relations and billing functions, expressed on a per customer account basis.

The U.S. peer group composite data shows an increasing trend between 2014 and 2015 followed by a decline until 2019 and increased variability through 2023. The U.S. utilities' individual 2023 measures range from approximately \$30 to approximately \$331 per customer.

Newfoundland Power's data indicates a relatively stable trend over the reporting period.



Year	U.S. Peer Group Composite	Newfoundland Power
2014	30.5%	49.3%
2015	26.2%	52.2%
2016	26.9%	45.6%
2017	25.6%	44.3%
2018	24.7%	44.3%
2019	25.2%	39.5%
2020	25.2%	44.3%
2021	24.9%	47.2%
2022	23.5%	41.0%
2023	21.3%	40.3%

Total Administration and Other Operating Expense per Total Operating Expense is a ratio of the total administration and general expense to the overall corporate electrical operating and maintenance ("O & M") expense (excluding fuel and purchased power) as defined by the FERC code of accounts.

The trend line for the U.S. utilities shows a general decline from 2014 to 2023. The U.S. utilities' individual 2023 measures varied from approximately 2% to 47%.

Newfoundland Power's data indicates an overall declining trend from 2014 to 2019, an increase to 2021 and a decrease in 2022 and 2023 which primarily reflects changes in pension costs.



Year	U.S. Peer Group Composite	Newfoundland Power
2014	30.2	18.4
2015	31.4	17.9
2016	32.4	16.7
2017	33.5	16.5
2018	32.9	15.9
2019	32.0	14.6
2020	34.6	15.2
2021	34.7	14.9
2022	37.0	14.0
2023	40.4	13.3

Total Operating Expense per Energy Sold represents the electrical operating and maintenance expense (excluding fuel and purchased power), as defined by the FERC code of accounts, expressed on a per MWh of total energy sold basis and adjusted for inflation. Total energy sold includes sales according to retail rate schedules, and sales for resale, such as sales to other distribution companies, sales to retailers, and energy interchanged through the power system (usually through transmission facilities).

The trend line for the U.S. utilities is upward over the period 2014 to 2023. The U.S. utilities' individual 2023 measures varied from approximately \$7 to \$184 per MWh.

The graph shows a gradual decline for Newfoundland Power from 2014 to 2023.



Year	U.S. Peer Group Composite	Newfoundland Power
2014	659.65	420.26
2015	686.16	407.36
2016	697.51	375.08
2017	700.76	367.19
2018	719.00	344.82
2019	684.20	317.90
2020	712.09	332.74
2021	624.71	313.86
2022	676.15	294.81
2023	714.55	286.76

Total Operating Expense per Customer represents the electrical operating and maintenance expense (excluding fuel and purchased power), as defined by the FERC code of accounts, expressed on a customer account basis and adjusted for inflation.

The trend line for the U.S. utilities is increasing over the reporting period. The U.S. utilities' individual measures in 2023 varied from approximately \$260 to approximately \$5,967.

The graph shows a gradual decline for Newfoundland Power during the reporting period.

Appendix C

Companies Included in U.S. Utility Peer Group

Companies Included in U.S. Utility Peer Group

(2023 Information)

	Number of Customers	Sales (MWh)	% Production of	% Transmission of Total O & M
Company	Customers			
Ameren Illinois Company	1,226,027	10,492,010	19.3%	8.7%
Atlantic City Electric Company	569,973	8,845,697	13.2%	6.9%
Central Hudson Gas & Electric	282,115	2,895,238	1.6%	5.5%
Delmarva Power & Light Company	549,745	12,044,550	9.6%	8.6%
Duke Energy Kentucky, Inc.	151,127	4,246,794	67.3%	13.1%
Duquesne Light Company	611,282	12,119,115	2.8%	4.3%
Green Mountain Power Corporation	273,006	4,640,119	11.3%	46.1%
Jersey Central Power & Light Company	1,163,141	19,290,185	0.0%	10.1%
Kingsport Power Company	49,139	1,892,831	0.0%	4.7%
Madison Gas and Electric Company	163,278	3,547,775	44.1%	20.5%
Metropolitan Edison Company	588,329	13,747,025	0.0%	5.4%
New York State Electric & Gas Corporation	919,140	16,612,546	6.7%	6.6%
Orange and Rockland Utilities, Inc.	242,331	4,096,586	0.2%	8.2%
Rockland Electric Company	75,487	1,460,324	0.0%	21.2%
The Narragansett Electric Company	404,034	3,461,286	0.0%	36.8%
Unitil Energy Systems, Inc.	80,854	660,187	0.4%	51.5%
West Penn Power Company	737,355	18,740,795	0.0%	29.1%
Wheeling Power Company	41,401	5,115,194	60.4%	30.6%