

WHENEVER. WHEREVER.  
We'll be there.



December 21, 2022

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

Attention: G. Cheryl Blundon  
Director of Corporate Services  
and Board Secretary

Dear Ms. Blundon:

**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 2021 *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,

A handwritten signature in black ink that reads "Lindsay Hollett".

Lindsay Hollett  
Senior Legal Counsel &  
Assistant Corporate Secretary

cc. Shirley Walsh  
Newfoundland and Labrador Hydro

Dennis Browne, KC  
Browne Fitzgerald Morgan Avis & Wadden

Newfoundland Power Inc.

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**Peer Group Performance Measures  
for Newfoundland Power**

**December 21, 2022**

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## **1.0 Introduction**

In Order No. P.U. 19 (2003), the 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 2021.

## **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, this report uses 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 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 Summary and 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 provides 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:

1. Newfoundland Power's reliability performance has fluctuated substantially over the period 2012 to 2021. The fluctuations have been the result of a greater incidence of major system events.
2. Newfoundland Power's cost performance during the period from 2012 to 2021 indicates an overall stable trend.
3. Newfoundland Power's safety performance has improved steadily since 2012.
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**

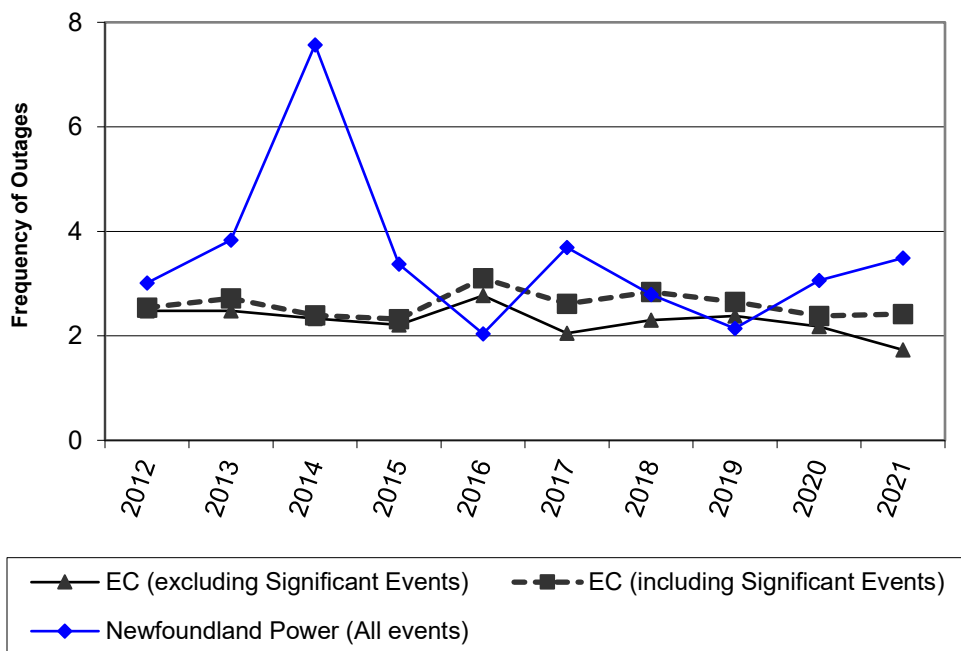
**Appendix A**  
**Canadian Composite Comparisons**

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## System Average Interruption Frequency Index (SAIFI)



Year	EC (Excluding Significant Events)	EC (Including Significant Events)	Newfoundland Power
2012	2.48	2.54	3.01
2013	2.48	2.72	3.83
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	2.30	2.84	2.79
2019	2.38	2.65	2.14
2020	2.18	2.38	3.06
2021	1.73	2.42	3.49

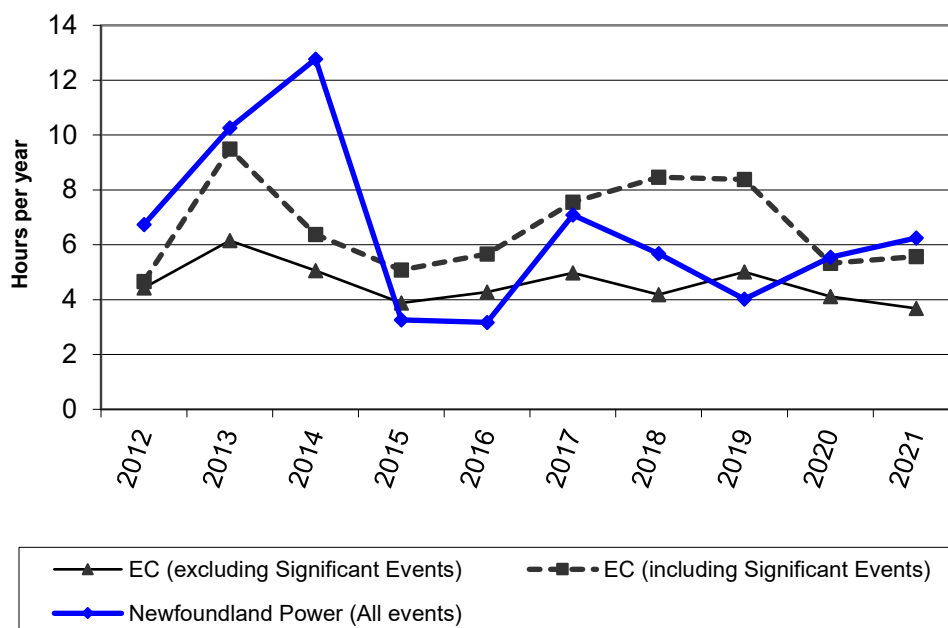
SAIFI is a standard industry index representing the average number of interruptions per customer served per year.

The EC trend line reflects the composite performance of participating Canadian utilities (37 participants in 2021). The trend line shows that the frequency of service interruptions to customers has been relatively stable over the period 2012 to 2021.

The Newfoundland Power data reflects the impact of Tropical Storm Leslie in September 2012, loss of supply events in January 2013 and January 2014, severe weather events in March and

December of 2017 and Snowmagedon in 2020. In 2021, data was impacted by Hurricane Larry in September, loss of supply events, and severe weather events in December.

## System Average Interruption Duration Index (SAIDI)



Year	EC (Excluding Significant Events)	EC (Including Significant Events)	Newfoundland Power
2012	4.43	4.66	6.74
2013	6.15	9.49	10.26
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	4.18	8.46	5.68
2019	5.01	8.38	4.02
2020	4.11	5.33	5.55
2021	3.68	5.57	6.25

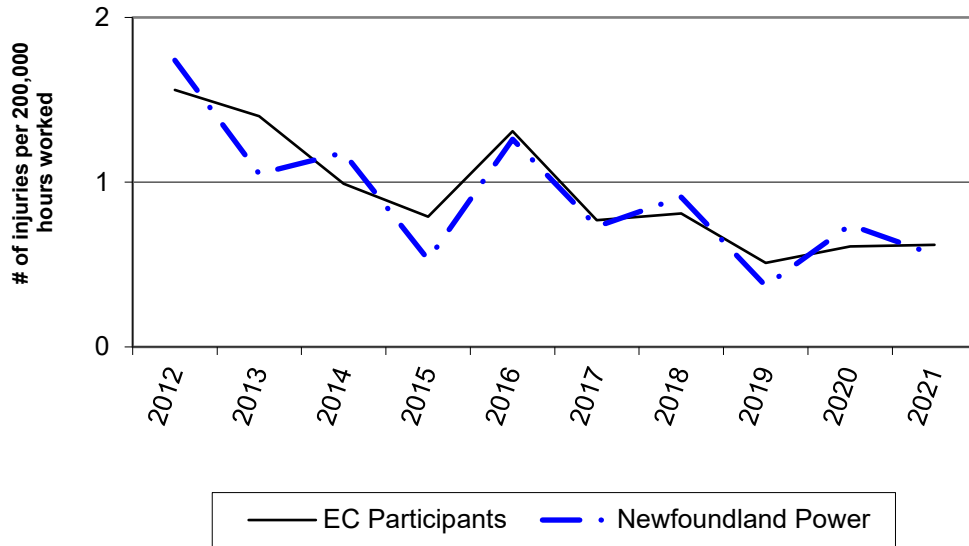
SAIDI is a standard industry index representing the average interruption duration per customer served per year.

The EC trend line reflects the composite performance of participating Canadian utilities (37 participants in 2021). 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 2013, 2017 and 2018, storms in Quebec in 2017 and 2018 and storms in Atlantic Canada in 2019.

The Newfoundland Power data reflects the impact of Tropical Storm Leslie in September 2012, loss of supply events in January 2013 and January 2014, severe weather events in March and December of 2017 and Snowmageddon in 2020. In 2021, data was impacted by Hurricane Larry in September, loss of supply events, and severe weather events in December.

## All-injury Frequency Rate (Injuries per 200,000 hours worked)



Year	EC Composite	Newfoundland Power
2012	1.56	1.74
2013	1.40	1.05
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

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 a comparable level of improvement over time.

**Appendix B**  
**U.S. Peer Group**  
**Composite Comparisons**

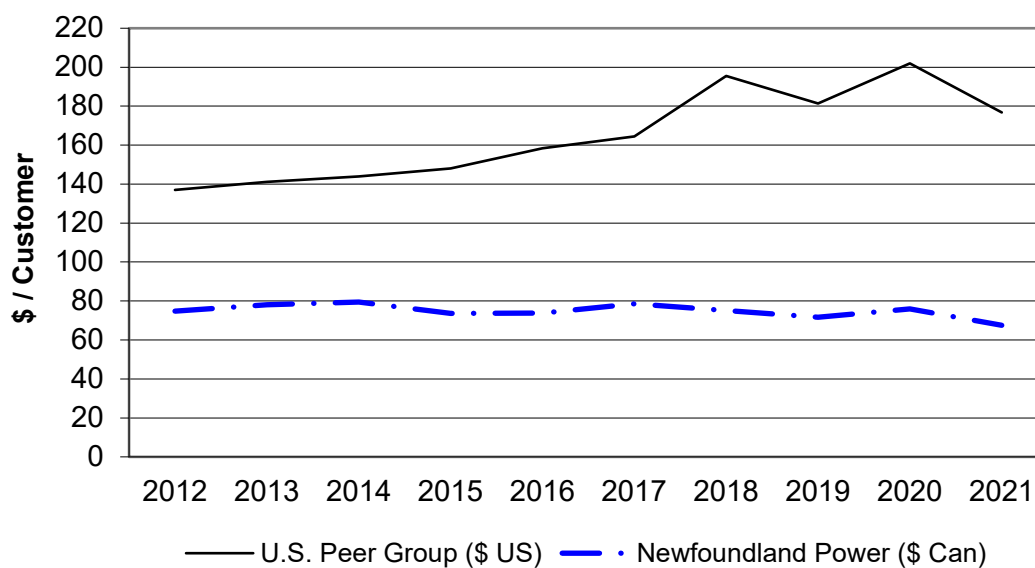
## Appendix B

### U.S. Peer Group Composite Comparisons

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## Total Distribution Operating Expense per Customer (2021\$)



Year	U.S. Peer Group Composite	Newfoundland Power
2012	137.0	74.8
2013	141.2	78.0
2014	143.9	79.5
2015	148.0	73.6
2016	158.4	73.7
2017	164.5	78.5
2018	195.5	75.2
2019	181.4	71.6
2020	202.0	75.9
2021	176.8	67.5

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.<sup>1</sup>

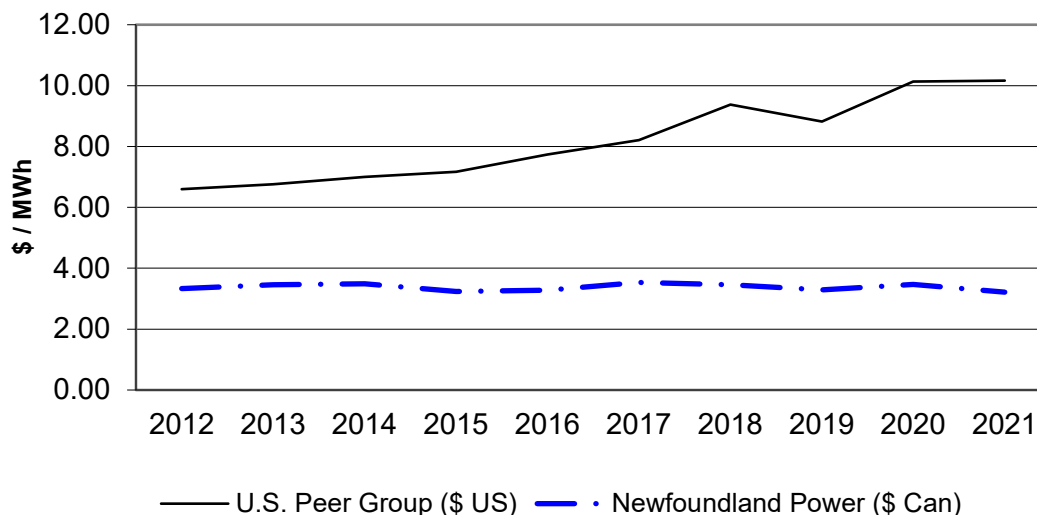
While the numbers fluctuate, the U.S. utility data shows the distribution operating cost per customer to be generally increasing over time. The U.S. utilities' individual 2021 measures range from approximately \$76 to approximately \$331 per customer.

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

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

### Total Distribution Operating Expense per MWh (2021\$)



Year	U.S. Peer Group Composite	Newfoundland Power
2012	6.60	3.33
2013	6.75	3.46
2014	7.00	3.49
2015	7.17	3.24
2016	7.74	3.28
2017	8.21	3.53
2018	9.38	3.46
2019	8.82	3.29
2020	10.13	3.47
2021	10.16	3.21

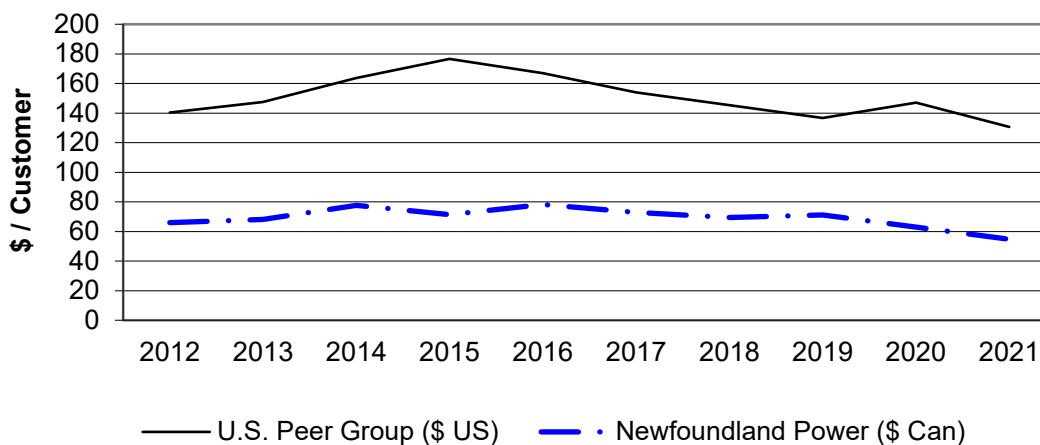
Total Distribution Operating Expense per MWh represents the total cost of operating and maintenance for the distribution function, as defined under the FERC code of accounts, expressed on a per MWh of retail sales basis and adjusted for inflation. It measures the total direct cost of operating labour 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 2021 measures range from approximately \$3 to approximately \$34 per MWh.

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

## Total Customer Service Expense per Customer (2021\$)



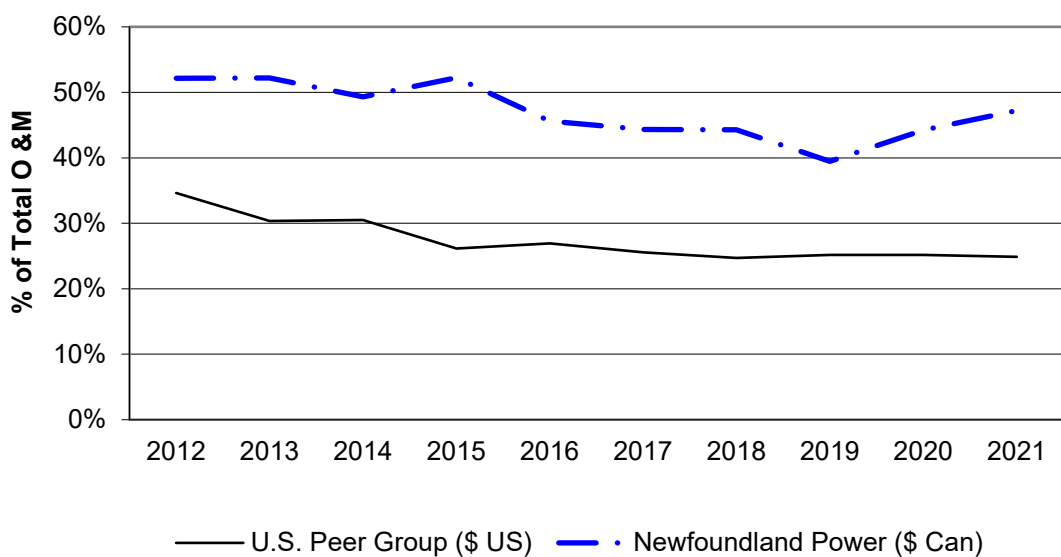
Year	U.S. Peer Group Composite	Newfoundland Power
2012	140.4	65.9
2013	147.4	68.1
2014	163.6	77.6
2015	176.6	71.3
2016	166.9	78.2
2017	154.0	72.9
2018	145.3	69.5
2019	136.7	71.2
2020	147.0	63.0
2021	130.6	54.7

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 2012 and 2015 followed by a decline until 2019. The U.S. composite increased in 2020 and decreased in 2021. The U.S. utilities' individual 2021 measures range from approximately \$32 to approximately \$333 per customer.

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

**Total Administration and Other Operating Expense  
per Total Operating Expense  
(excluding fuel and purchased power)**



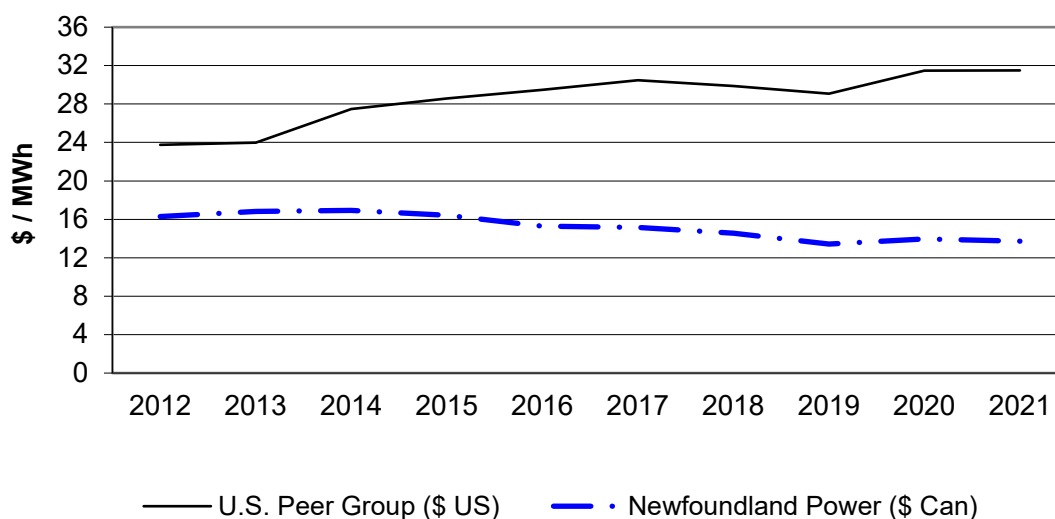
Year	U.S. Peer Group Composite	Newfoundland Power
2012	34.6%	52.1%
2013	30.4%	52.2%
2014	30.5%	49.3%
2015	26.2%	52.2%
2016	26.9%	45.6%
2017	25.6%	44.3%
2018	24.7%	44.3%
2019	25.2%	39.5%
2020	25.2%	44.3%
2021	24.9%	47.2%

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 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 2012 to 2018 and a stable trend following that period. The U.S. utilities' individual 2021 measures varied from approximately 3% to 53%.

Newfoundland Power's data indicates an overall declining trend from 2012 to 2019 and an increase following that period which primarily reflects changes in pension costs.

**Total Operating Expense  
per Energy Sold  
(excluding fuel and purchased power)  
(2021\$)**



Year	U.S. Peer Group Composite	Newfoundland Power
2012	23.8	16.3
2013	24.0	16.8
2014	27.5	16.9
2015	28.6	16.4
2016	29.5	15.3
2017	30.5	15.2
2018	29.9	14.6
2019	29.1	13.4
2020	31.5	14.0
2021	31.5	13.7

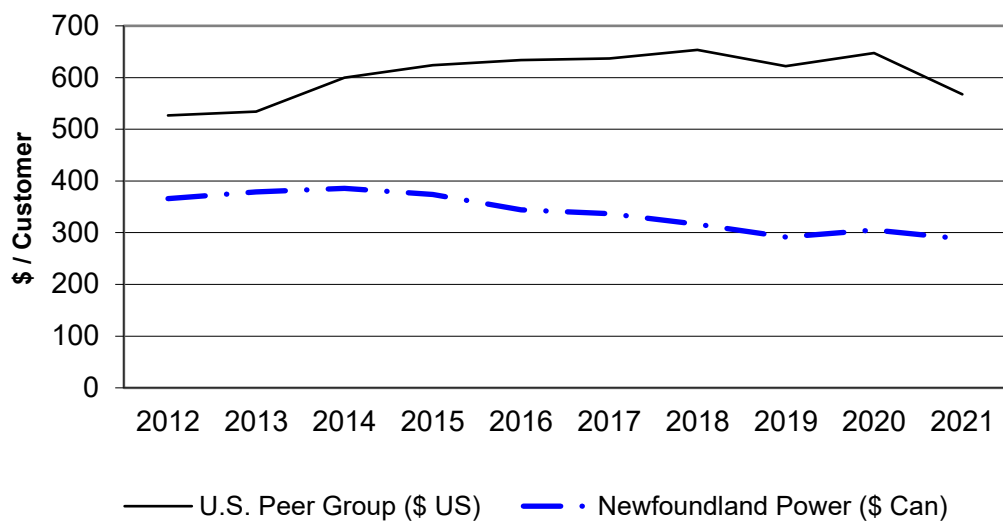
Total Operating Expense per Energy Sold represents the electrical operating and maintenance expense (excluding fuel and purchased power), as defined by the FERC code of accounts, expressed on a per MWh of total energy sold basis and adjusted for inflation. Total energy sold includes sales according to 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 2012 to 2021. The U.S. utilities' individual 2021 measures varied from approximately \$8 to \$102 per MWh.

The graph shows a relatively stable trend for Newfoundland Power from 2012 to 2015, and a decline following that period.

**Total Operating Expense  
per Customer  
(excluding fuel and purchased power)  
(2021\$)**



Year	U.S. Peer Group Composite	Newfoundland Power
2012	526.78	365.94
2013	533.93	379.03
2014	599.55	385.75
2015	623.66	373.91
2016	633.96	344.28
2017	636.92	337.03
2018	653.50	316.50
2019	621.87	291.79
2020	647.22	305.42
2021	567.80	288.09

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 2021 varied from approximately \$221 to approximately \$2,954.

The graph shows a stable trend for Newfoundland Power from 2012 to 2014 and a declining trend since 2014.

**Appendix C**

**Companies Included in  
U.S. Utility Peer Group**

**Companies Included in U.S. Utility Peer Group  
(2021 Information)**

<b>Company</b>	<b>Number of Customers</b>	<b>Sales (MWh)</b>	<b>% Production of Total O &amp; M</b>	<b>% Transmission of Total O &amp; M</b>
Ameren Illinois Company	1,228,564	8,093,456	13.0%	10.2%
Atlantic City Electric Company	564,929	10,052,105	11.7%	7.6%
Central Hudson Gas & Electric	249,483	2,721,708	1.9%	5.6%
Delmarva Power & Light Company	539,708	12,316,055	3.7%	9.1%
Duke Energy Kentucky, Inc.	146,514	4,499,968	58.5%	15.6%
Duquesne Light Company	606,085	12,581,275	0.1%	5.3%
Green Mountain Power Corporation	269,867	4,539,710	10.8%	47.0%
Jersey Central Power & Light Company	1,150,247	19,889,720	0.0%	12.6%
Kingsport Power Company	48,597	1,626,549	0.0%	5.2%
Madison Gas and Electric Company	160,976	3,645,384	43.7%	20.9%
Metropolitan Edison Company	581,453	14,248,185	0.0%	10.1%
New York State Electric & Gas Corporation	913,611	16,343,021	5.9%	7.0%
Orange and Rockland Utilities, Inc.	238,798	4,252,533	0.1%	7.0%
Rockland Electric Company	74,275	1,495,589	0.0%	4.6%
The Narragansett Electric Company	444,908	4,045,834	0.0%	22.1%
Unitil Energy Systems, Inc.	80,339	799,848	0.4%	52.9%
West Penn Power Company	733,761	19,373,779	0.0%	40.6%
Wheeling Power Company	41,685	5,063,487	28.1%	49.4%