

# 2019 Sustainability Report



## How to use this document:

Welcome – the CEA Sustainable Electricity Qualitative Reporting Template captures important context that can be missed in the quantitative reporting process.

There are four parts to this document

1. General Utility Data (All utilities to complete)
2. Key Company Initiatives/Success Stories (All utilities to complete **at least one for each pillar**)
  - a. Low Carbon Economy
  - b. Infrastructure
  - c. Building Relationships
  - d. Risk Management
  - e. Business Excellence
3. Qualitative indicators
  - a. Biodiversity
  - b. Indigenous Consultation
  - c. Customer Satisfaction
  - d. Support for Low-Income Customers
  - e. CO2 Target
  - f. Utility Leadership in System Advancement
4. Emissions Related Explanatory Notes (As Applicable)
  - a. Carbon Dioxide Equivalent
  - b. Atmospheric Emissions (NOX, SO2)
  - c. Mercury Emissions
  - d. Non-compliance Fines
  - e. Priority Spills
  - f. SF6 Emissions

Company Name: Newfoundland Power

## General Utility Data

### (This section is mandatory for all companies)

Please provide a brief description of your utility including its corporate structure, business services provided, Canadian subsidiary companies or operations, the location of facilities, operations and service area(s), and the type and number of residential customers, if applicable.

#### *Brief Description of Utility and Corporate Structure.*

*Newfoundland Power and its predecessor companies have been engaged in the production and sale of electricity since 1885. Newfoundland Power, a regulated investor-owned electric utility, serves approximately 269,000 customers throughout the island portion of the province of Newfoundland and Labrador.*

*Newfoundland Power...*

- Operates 23 hydro generating plants, six backup generators.*
- Operates 130 substations.*
- Maintains approximately 12,500 km of transmission and distribution lines.*

*Identify the reporting boundary (e.g. whether or not the information provided cover subsidiaries, partnership arrangements, Power Purchase Agreements etc.)*

#### **Business Services Provided (indicate with "X")**

Generation and Sale of electricity	Generation and Sale of Thermal Energy	Transmission	Distribution	Design and Construction Services	
X		X	X	X	
Other 1 (explain)	Other 2 (explain)	Other 3 (explain)			

#### **Canadian Subsidiaries or Operations**

Name	Location

#### **Generating Facilities**

Name	Location
Mobile Diesel #3	Grand Bay
Mobile Gas Turbine	Grand Bay
Port Aux Basques Diesel	Port Aux Basques
Wesleyville Gas Turbine	Pound Cove
Greenhill Gas Turbine	Grand Bank
Petty Harbour Plant	Petty Harbour
Pierre's Brook Plant	Dean's Road, Witless Bay
Mobile Plant	Mobile

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Morris Plant	Mobile
Tors Cove Plant	Tors Cove
Rocky Pond Plant	Tors Cove
Cape Broyle Plant	Cape Broyle
Horsechops Plant	Cape Broyle
Topsail Plant	Topsail
Seal Cove Plant	Seal Cove
Hearts Content Plant	Hearts Content
Victoria Plant	Victoria
New Chelsea Plant	New Chelsea
Pittman's Pond Plant	New Chelsea
West Brook Plant	St. Lawrence
Fall Pond Plant	Little St. Lawrence
Lawn Plant	Lawn
Rattling Brook Plant	Norris Arm
Sandy Brook Plant	Grand Falls (rear of Abitibi Paper Mill)
Lockston Plant	Opposite turn off to Community of Trinity
Port Union Plant	Port Union
Lookout Brook Plant	Steel Mountain Road off TCH
Rose Blanche Plant	Rose Blanche
<b>Customer Distribution</b>	
<b>Category of Service</b>	<b>Number or Fraction of Customers</b>
Residential and Commercial and Street Lighting	269,000

## Key Company Initiatives/Success Stories

Please provide a minimum of one or maximum of three key initiatives/success stories from 2019 related to each pillar/principle. These stories should be no more than a paragraph in length and should be written in publication ready format. Any accompanying photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution.

### **Example related to the environmental stewardship principle**

**Columbia Power is constructing a new, environmentally-responsible transmission line:** As part of the Waneta Expansion Project, Columbia Power Corporation constructed a 10-kilometre transmission line through a rare ecotype in Southern British Columbia. A number of measures were implemented to minimize environmental impact, including restricting construction activity during the nesting season of the endangered yellow-breasted chat. Through the Waneta Terrestrial Compensation Program, Columbia Power is providing \$50,000 per year over seven years to projects supporting conservation and habitat restoration in the area of the transmission line.

## **Low Carbon Economy (minimum one story)**

### **Key Focus Areas:**

***Climate change mitigation; Internal energy efficiency and customer conservation programs (retail); Electrification of transportation, buildings, and processes***

*Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution.*

#### **Story 1:**

In 2019, Newfoundland Power expanded its energy efficiency resources for businesses. This included addition of local business case studies and videos to help business owners realize their opportunities for energy efficiency. Other helpful tools were made available, such as a return on investment calculator and tips for small businesses, new commercial buildings and employee engagement.

## **Infrastructure (minimum one story)**

### **Key Focus Areas:**

***Investments in new and refurbished infrastructure; Integration of renewable energy, including energy storage; System reliability and resiliency against severe weather impacts***

*Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution*

#### **Story 1:**

The second phase of the three-year project to rebuild transmission line 363L supplying customers on the Baie Verte Peninsula was completed and the line energized in 2019. This portion of the project included the rebuild of 22km of 138kV H-Frame transmission line between Baie Verte Junction substation and Seal Cove Road substation located in Baie Verte, Newfoundland.

The line was originally constructed in 1963, and its length was approximately 62 km of original construction, consisting of 478 two-pole and three-pole H-Frame structures, with nonstandard 266.8 ACSR transmission line conductor.

Transmission line 363L is a radial line that serves as the only supply to Newfoundland Power and Newfoundland Hydro customers on the Baie Verte Peninsula. This makes 363L critical for the residents and mining operations in the area.

## Building Relationships (minimum one story)

**Key Focus Areas:**

***Early engagement and consultation of local communities and stakeholders; Early engagement and consultation of Indigenous Peoples; Enhancing customer experience, low-income customer programs, and meeting customer expectations***

*Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution.*

**Story 1:**

**In 2019, takeCHARGE encouraged not-for-profit and community groups to “Make the Switch”. Through a proposal-based process, 21 not-for-profit organizations will be provided with 4,500 LED light bulbs to either help with energy costs or to distribute to clients of their organizations who are in need.**

## Risk Management Systems (minimum one story)

**Key Focus Areas:**

***Environmental risk avoidance and mitigation, including climate change adaptation; Protection of employee, contractor, and public health and safety; Use of standards to reduce enterprise risks, including cyber security threats.***

*Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution.*

**Story 1:**

**In an effort to help prevent soft tissue injuries Newfoundland Power launched a new Program called Power Moves. All employees were trained in the new ergonomic, body preparation and stretching. Included in this training were components on manual lifting, situational awareness and office ergonomics.**

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**Story 2:**

There is nothing more important than the safety of our employees, our contractors and our customers. In 2019, we launched a new campaign about safety around electricity, reminding everyone to “See the Wires”. We want to make sure everyone stays safe – at home, at work and at play.

## Business Excellence (minimum one story)

**Key Focus Areas:**

*Investments in innovation culture and technology advancement; Engagement of regulators, supply chain partners, and other stakeholders; Employee recruitment, training, and retention.*

*Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution.*

**Story 1:**

Newfoundland Power implemented a new Outage Management System in 2019. The system accurately represents the extent of customers affected and the geographic area of an outage. It enables more detailed information about outage cause, number of customers impacted and restoration progress to be available to customers, the media, and others. Customers seen enhancements to both the outage centre webpage and the text or email outage alerts as a result of this upgrade.

## Qualitative indicators

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### **Biodiversity**

1. Report on any current and future plans for managing impacts on biodiversity.

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Biodiversity is imbedded into Newfoundland Powers operations through operational procedures, training and project planning engagements.

2. Report approaches currently used for pest and vegetation management along transmission and distribution corridors.

The methods of vegetation management will be determined based upon the location, species and height and density of growth with consideration of public safety, environmental and economic factors. Determining factors such as time of year are also considered to ensure limited disturbances to avian, wildlife, aquatic and flora/fauna.

## **Qualitative indicators**

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### **Indigenous Consultations**

3. Please identify the method and/or protocols that guide consultation and engagement with Indigenous communities.

There are no Indigenous communities within our service area so methods/protocols have not been developed.

### **Customer Satisfaction**

4. If you answered 'yes' to conducting customer satisfaction surveys, provide the following:
  - a. Frequency with which surveys are conducted.

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- b. Whether the surveys were managed by an outside party or if they were managed internally.
- c. Approximate or range of response rates.
- d. Corporate programming, procedural or other changes made based on results of the customer satisfaction surveys.
- e. If you answered 'no' to the indicator question provide rationale for not having said program.

- a. Survey results are reported on a quarterly basis.
- b. Outside party
- c. We achieve between 1800-1900 responses each survey. Survey is completed until target is achieved.
- d. The nature of our survey has changed over the last 5 years. Prior to the changes, the survey was completed with a random sampling of customers. In addition to the random sampling we now conduct surveys with customers who have recorded a transaction with us. This helps us better understand the level of service we are providing to our customers and separate that from environmental factors such as media which may influence scores. Responses to surveys are used to assist in identification of customer experience enhancements and have led to a broadening of self-service options offered by the company for customers to avail of.

### **Support for Low-Income Customers**

- 5. If you answered 'yes' to having a program to help low-income customers, provide the following:
  - a. Proportion of total customers that fall within the low income support programming (%).
  - b. Proportion of applying customers that are approved for low income support (%).
  - c. Income cut off that allows a customer to qualify for the low income support (\$).
  - d. Comparison of the number of current customers with low income support to the numbers in previous years.
  - e. If you answered 'no' to the indicator question provide rationale for not having said program.

NA

### **CO2 Target**

- 6. If your company has a CO2 target, please provide details and a link for more information

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No CO2 target. Emissions as the result of generation are generally on an as needed basis and tend to be low environmental impact.

## **Utility Leadership in System Advancement**

7. If your company is involved in innovation, provide detail on the innovation area being noted. The utility shall identify any internal performance measures associated with the above noted indicators and the performance trend for each.

Newfoundland Power does not use metrics up front, but we have a method to evaluate innovation opportunities against business value, with the purpose of approving a pilot project. Once sanctioned we will then have associated guidelines and evaluation criteria and metrics to be measured (business efficiencies, improved safety or customer service). If they meet at least one of these, they can likely turn into full blown projects, depending on scope/cost.

## **Emissions Related Explanatory Notes (As Applicable)**

### **Carbon Dioxide Equivalent**

**Please provide context on the following:**

1. Did your company emissions change (+/- 10 percent) relative to the previous reporting year? Yes
2. If yes, please provide the technical reasons for the changes.
3. If available, please indicate any initiatives undertaken by your utility to reduce CO<sub>2</sub> emissions.

**Yes. Decreased because of reduced demand for backup fossil fuel generating units.**

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## Atmospheric Emissions (NO<sub>x</sub>, SO<sub>2</sub>)

Please provide context on the following:

1. Did your company emissions change (+/- 10 percent) relative to the previous reporting year? **No**
2. If yes, please provide the reasons for the change (e.g. greater use of coal generation etc.).
3. If available, please indicate any initiatives undertaken by your utility to reduce NO<sub>x</sub> emissions.

NA

## Mercury Emissions

Please provide context on the following:

1. Did your company emissions change (+/- 10 percent) relative to the previous reporting year? **No**
2. If yes, please provide the technical reasons for any changes.
3. If available, please indicate any initiatives undertaken by your utility to reduce mercury emissions.

NA

## Non-compliance Fines

Did your company incur any environmental non-compliance fines?

No

If your utility received any environmental non-compliance fines, provide a qualitative description of the incidents and any corrective actions and preventative measures taken to avoid future incidents.

NA

If your company received any orders/notices for a violation of a particular environmental regulation/law, provide a qualitative description of the incidents and any corrective actions and preventative measures taken to avoid future incidents.

NA

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## Priority Spills

Did your company incur priority spills?

No

Provide descriptions of your utility's priority spills (maximum two examples).

NA

## SF<sub>6</sub> Emissions

Did your company emissions change (+/- 10 percent) relative to the previous reporting year? If yes, please provide the technical reasons for the changes.

As required under the CEA – Environment Canada Memorandum of Understanding (MOU), are you using the joint CEA-EC methodology to determine SF<sub>6</sub> emissions? (Y/N) If no, describe why not.

Yes. CEA methodology is currently in use to measure SF6.

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**IMPORTANT: PLEASE COMPLETE AND SIGN - SF<sub>6</sub> QUALITY CONTROL CHECKLIST****NOTE: COMPANIES WITHOUT SF<sub>6</sub> EMISSIONS ARE REQUESTED TO NOTE****SF<sub>6</sub> Quality Control Checklist (mandatory for all utilities with SF<sub>6</sub> emissions)**

(a)	Utility Name	Newfoundland Power Inc.	
(b)	Submission Year(s)	2020	
(c)	Completed by:	Name:	Jason Dalton
		Title:	Environmental Specialist

**QC activities to be performed by utilities**

	QC Activity	Complete?	Errors detected?		Completion Date	
		Yes	Yes	Date Corrected		No
1	Check that SF <sub>6</sub> data has been obtained from all district offices, field locations, etc. as appropriate. Archive source records. <i>SF<sub>6</sub> raw data and calculation records can be requested by the GHG Division of Environment Canada as necessary (e.g., in a major international review of GHG Inventory).</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	4/9/2020
	Notes and supporting documents:					
2	Check that any assumptions made on the data are documented and archived.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	4/9/2020
	Notes and supporting documents:					
3	If the SF <sub>6</sub> tracking method used involves any weighing, ensure that the scale is functioning properly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	4/9/2020
	Notes and supporting documents:					
4	Check for transcription and calculation errors	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	4/9/2020
	Notes and supporting documents:					
5	Investigate and explain probable cause of any significantly different values from previous year's	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4/9/2020
	Notes and supporting documents: No significant change from 2018.					
6	Check that all SF <sub>6</sub> data fields of the CEA SE data submission templates have been accurately recorded and submitted to CEA. <i>(This check is only applicable to CEA members)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
	Notes and supporting documents:					
7	Check that the SF <sub>6</sub> tracking method noted on SE data template reflects the method that was used to record the current year's data. <i>(This check is only applicable to CEA members)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	

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	Notes and supporting documents:					
8	Check that the SF6 tracking method, along with the SF <sub>6</sub> estimate, is accurately reported to the GHGD. <i>(This check is only applicable to non-CEA members)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
	Notes and supporting documents:					

*If available, photo(s) may accompany an initiative or success story. Photos should be submitted as .jpeg files with a 300 dpi, or higher, resolution. List any photos that are part of this submission.*

**Sign-off**

I have completed the above checklist	
Name	Jason
Title	Environmental Specialist
Date	APR 9, 2020

## 2020 (2019 Data Year) Quantitative Reporting Indicators

### CAPACITY AND GENERATION

#### Installed Capacity (MW)

Coal (MW)	NAPP
Oil (MW)	NAPP
Diesel (MW)	NAPP
Natural Gas (MW)	NAPP
<b>TOTAL FOSSIL</b>	<i>Auto populated</i>
Hydroelectric (MW)	NAPP
Nuclear (MW)	NAPP
Biomass (MW)	NAPP
Wind (MW)	NAPP
Solar (MW)	NAPP
Tidal (MW)	NAPP
Biofuel (MW)	NAPP
Other renewables (MW)	NAPP
<b>TOTAL NON-FOSSIL</b>	<i>Auto populated</i>
<b>TOTAL INSTALLED CAPACITY</b>	<i>Auto populated</i>

#### Gross Generation (GWh)

Coal (GWh)	NAPP
Oil (GWh)	NAPP
Diesel (GWh)	1.04
Natural Gas (GWh)	NAPP
<b>TOTAL FOSSIL</b>	<i>1.04</i>
Hydroelectric (GWh)	361.64
Nuclear (GWh)	NAPP
Biomass (GWh)	NAPP
Wind (GWh)	NAPP
Solar (GWh)	NAPP
Tidal (GWh)	NAPP
Biofuel (GWh)	NAPP
Other renewables (GWh)	NAPP
<b>TOTAL NON-FOSSIL</b>	<i>361.64</i>
<b>TOTAL GROSS GENERATION</b>	<i>362.68</i>

#### Net Generation (GWh)

Coal (GWh)	NAPP
Oil (GWh)	NAPP
Diesel (GWh)	NAPP
Natural Gas (GWh)	NAPP
<b>TOTAL FOSSIL</b>	<i>Auto populated</i>
Hydroelectric (GWh)	358.68
Nuclear (GWh)	NAPP
Biomass (GWh)	NAPP
Wind (GWh)	NAPP
Solar (GWh)	NAPP
Tidal (GWh)	NAPP
Biofuel (GWh)	NAPP
Other renewables (GWh)	NAPP
<b>TOTAL NON-FOSSIL</b>	<i>Auto populated</i>
<b>TOTAL NET GENERATION</b>	<i>Auto populated</i>
Total renewable energy purchased from non-CEA affiliated companies	NAPP

Total non-renewable energy purchased from non-CEA affiliated companies	NAPP
Grid Connected renewable generation by customer (total GWh)	NAPP
Station Use - including plant losses (GWh) - <i>Automatically populated</i>	2.96
<b>LOW CARBON FUTURE</b>	
<b>Carbon Dioxide Equivalent (CO2 eq)</b>	
Does your company have a carbon or carbon equivalent emissions target (Yes/No)	No
What is the total carbon equivalent emissions from operations (CO2e tonnes)	1299.6
<b>SF6 Releases</b>	
Total kg of SF6 Used for Maintenance Purposes (kg)	33.7
<b>External Conservation Savings</b>	
Provide the total annual energy saved through external energy conservation programs (MWh/year)	185,100
Provide the GHG emissions avoided through external energy conservation programs (CO2e/tonnes)	36,081.00
<b>Internal Conservation Savings</b>	
Does your company have internal energy conservation programs? (Y/N)	No
If yes, provide the annual saving? (MWh/Year)	NAPP
<b>INFRASTRUCTURE</b>	
Total capital expenditures on new / refurbished generation infrastructure (\$)	11,754,000
Total capital expenditures on new / refurbished transmission infrastructure (\$)	28,688,000
Total capital expenditures on new / refurbished distribution infrastructure (\$)	46,801,000
Total investment in infrastructure (\$)	87,243,000
<b>System Reliability (Internally Reported)</b>	
System average interruption duration (minutes)	
System average interruption duration (minutes) - for significant weather events	
System average interruption frequency (#/year)	
System average interruption frequency (#/year) - for significant weather events	
<b>BUILDING RELATIONSHIPS</b>	
<b>INDICATOR</b>	
<b>Stakeholder Engagement</b>	
Does your company have a formal stakeholder engagement policy and/or documented process, including processes for identifying stakeholder concerns and opportunities? (Y/N)	Yes
<b>Customer Satisfaction</b>	
Does your company conduct customer satisfaction surveys? (Y/N)	Yes
<b>Support to Low-Income Customers</b>	
Does your company have a program (s) to help low income customers (Y/N)	Yes
a. Is this regulated/mandated by the province? (Y/N)	No
<b>Business Partnerships with Aboriginal Communities</b>	
Provide the number of formal business relationships with Aboriginal communities (number)	
a. Suppliers (products and services) (#)	NA
b. Partnerships/MOUs (#)	NA
c. Joint Ventures (#)	NA
d. Other (#)	NA
Provide the total monetary value of those formal relationships identified above (\$)	NA
<b>Aboriginal Stakeholder Identification</b>	
Has your company formally identified relevant Aboriginal groups within your service area? (Y/N)	No
<b>Aboriginal Stakeholder Consultation</b>	
Does your company have documented procedures requiring early consultation or engagement with Aboriginal communities during project planning and development? (Y/N)	No

## RISK MANAGEMENT

### Atmospheric Emissions - Sulphur Dioxide SO<sub>2</sub>

Total Annual SO<sub>2</sub> Emissions from fossil generation (tonnes)

1.66

### Atmospheric Emissions - Nitrogen Oxides NO<sub>x</sub>

Total Annual NO<sub>x</sub> Emission from fossil generation (tonnes)

12.32

### Atmospheric Emissions - Mercury (Hg)

Total Annual Mercury Emission from fossil generation (kilograms)

NAPP

### Non-Compliance Fines

Did your company receive any notices, violations or convictions related to suspected or actual non-compliance? (Y/N)

No

### Spills

A Priority spill refers to: a petroleum spill that is over 500 litres; a spill containing PCBs over 1 g; and or, any volume of petroleum based or PCB contaminated substance that enters a water body

Total Number of Priority spills (#)

0

Significant spills to land (petroleum-based spills ≥500 L)

Total Number of spills (#)

0

Total estimated volume (in 1,000's of litres)

0

Significant spills to water (petroleum-based spills ≥100 L)

Total Number of spills (#)

0

Total estimated volume (in 1,000's of litres)

0

### Water Consumption

Total Water Consumption (Cubic meters M3)

NAPP

### Health and Safety (**Internally Reported**)

All Injury / Illness Frequency Rate (injuries per 200 000 hours)

Lost Time Injury / Illness Frequency Rate (lost-time injuries per 200 000 hours)

Lost Time Injury Severity Rate (calendar days lost per 200 000 hours)

## BUSINESS EXCELLENCE

### Community Investment

Total employee compensation (\$ per T4s and T4As)

69,013,118.23

### Utility Leadership in System Advancement

Is your company involved in the following innovation areas?

a. Robotics & drones (Y/N)

Yes

b. Home and facility automation (Y/N)

No

c. Smart grid development (Y/N)

No

d. Energy storage (Y/N)

No

e. Distributed electricity (Y/N)

No

f. Electrification of transportation, buildings or industrial processes (Y/N)

Yes

g. Asset optimization (Y/N)

Yes

h. Other

Yes

### Equity and Inclusion

Total number of full time equivalent employees (number)

616

Provide the percentage of staff turnover due to attrition (%)

2.40%

Does your company have a documented, publicly available diversity/inclusion policy (Y/N)

No

### Composition of company governance bodies (Percentage of male and female):

Board of Directors (%)

64% M / 36% F

Executives (EVP, Senior VP, VP) (%)

75% M / 25% F

1st Level Management below Executives (%)

83.3% M / 16.7% F