



# **2022/23 BUSINESS PLAN**

**April 2022**

## Submission Letter

April 2022

Honourable Mike Holland  
Minister of Natural Resources and Energy Development  
Province of New Brunswick  
PO Box 6000  
Fredericton NB E3B 5H1

Minister,

We are pleased to submit the 2022/23 Business Plan of New Brunswick Power Corporation for the fiscal year beginning April 1, 2022 in compliance with section 4 of the *Accountability and Continuous Improvement Act*. We are accountable for the preparation of this Business Plan and for achieving the specific goals and objectives contained herein.



Charles V. Firlotte  
Chair, Board of Directors



Keith Cronkhite  
President & Chief Executive Officer

***NB Power's 2022/23 Business Plan has been prepared by management and reviewed and approved by the New Brunswick Power Corporation Board of Directors.***

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## ABOUT NB POWER

NB Power is the largest electric utility in Atlantic Canada and is responsible for the generation, transmission and distribution of electricity throughout New Brunswick. NB Power's more than 2,500 employees across New Brunswick are dedicated to providing safe, reliable and economically sustainable service to more than 400,000 direct and indirect customers in New Brunswick.

The *Electricity Act* gives NB Power the authority to sell electricity within the province and to manage and operate NB Power's resources and facilities for the supply, transmission and distribution of electricity within New Brunswick. The *Act* also establishes that, to the extent practicable, rates charged by NB Power shall be maintained as low as possible and changes in rates shall be stable and predictable from year to year. NB Power's rates are regulated by the New Brunswick Energy and Utilities Board.

As a provincial Crown Corporation, the Province of New Brunswick is the owner and sole shareholder of NB Power. NB Power reports to the Shareholder through the Minister of Natural Resources and Energy Development and the Shareholder's expectations are expressed through legislation, policies and a mandate letter. NB Power's most recent mandate letter from the Minister calls for focus on a number of priorities.

## Mandate

### COVID-19

Throughout COVID-19, NB Power customers have been able to rely on energy that powers New Brunswickers' homes, businesses and hospitals because NB Power has ensured appropriate measures are in place to safeguard its essential service while prioritizing employee and customer safety.

### Climate Change

The transition to a lower carbon economy is an essential priority for NB Power. Therefore, NB Power is focused on several initiatives developed to lower its carbon footprint while keeping rates competitive.

### *Reducing Greenhouse Gas*

An important area of focus is reducing NB Power's carbon footprint. NB Power is minimizing its greenhouse gas emissions by reducing its internal energy usage, diversifying and optimizing its generation mix with additional non-emitting sources and reducing its coal-fired generation. In addition, NB Power is exploring alternative non-emitting generation and technology options of the future such as small modular reactors.

### ***Energy Efficiency***

NB Power continues to mature service offerings aimed at reducing the demand for energy and providing savings to customers. These services are available for all classes of customers and for all fuel types used in the province. Working with the Province, NB Power will develop targets and long-term funding for all-fuels energy efficiency programs to achieve further efficiency gains. NB Power will also continue as the delivery agent for the Plug-In NB electric vehicle rebate program, adapting the program to align with funding and direction from the Province.

### **First Nations**

NB Power recognizes the distinct value, culture and significance of First Nations and is committed to fostering positive and productive relationships with First Nations in New Brunswick including providing specific opportunities in First Nations employment and procurement. NB Power's First Nation Strategic Approach enhances and complements corporate policies and guides the utility in its relationships with First Nations. NB Power also works with the Department of Aboriginal Affairs and consultation staff regarding the duty to consult through the Initiative Intake Process.

### **Debt Reduction**

NB Power remains committed to meeting its mandate to achieve a capital structure of at least 20 per cent equity by 2027. The 2022/23 Business Plan has been developed to reflect that commitment through cost reductions and the rationalization and prioritization of capital investment requirements. These actions have been balanced with ensuring NB Power continues to deliver safe, reliable and competitive electricity and services to its customers.

### **Community Collaboration**

NB Power actively works with communities throughout New Brunswick to meet energy-related needs and support economic development in the province. This includes partnering in the build of the first smart community and testing advanced smart grid solutions. NB Power also works collaboratively to understand unique community needs, build capacity and advise or develop energy solutions. NB Power is committed to First Nations energy-related development programs such as the Locally Owned Renewable Energy Projects that are Small Scale Program.

### **New Business Development**

The energy industry continues to change at an accelerated rate. NB Power recognizes these changes come with opportunities that can support its vision of sustainable energy for future generations. NB Power provides regular updates to the Shareholder on these opportunities to ensure alignment and support. For example, NB Power is continuing to explore small modular reactors as a new business development opportunity.

## **New Brunswick Energy Marketing**

New Brunswick Energy Marketing continues to be active in the business of importing and exporting electricity and related products and services to keep rates competitive in New Brunswick. It remains focused on preserving existing customers while exploring opportunities to expand in other evolving energy-related markets.

## OUR PLAN

In alignment with the mandate provided by the Province and the direction established by the NB Power Board of Directors, NB Power's 2022/23 business plan has been developed to address three longer-term strategic objectives

- reduce debt to improve the financial health of the organization
- advance the modernization of the grid
- support the transition to a low-carbon economy

In doing so, NB Power must continue to put customers at the centre of everything it does, ensure the utility is responsive to customers' changing expectations and transform NB Power's organizational culture to demonstrate increased value for customers.

In the development of this plan, NB Power has made every effort to reduce controllable costs, rationalize capital investment requirements and minimize upward rate pressure while targeting critical debt reduction opportunities. NB Power's target is to achieve a debt/equity ratio of 80/20 by 2027.

NB Power will develop and implement strategies to meet financial targets recognizing increasing cost pressures due to climate change impacts such as increasing storms, variable hydro flows and carbon pricing, rising fuel costs, infrastructure renewal and emerging advancements in the industry.

The plan for 2022/23 balances core operations with strategic initiatives and a renewed commitment to continuous improvement. The focus of core operations is on debt reduction, safe and reliable operations and the customer experience and stakeholder relationships. Strategic initiatives are prioritized to achieve grid and operations modernization and address climate change and reduce carbon emissions.

The energy sector is in a period of transition resulting in a need for regulatory modernization. Recent amendments to the *Electricity Act* put NB Power on a new course. The changes strengthen NB Power's ability to meet its financial targets, create efficiencies and lay the foundation to ensure customer needs and expectations are at the centre of everything NB Power does. This includes leveraging new technologies, products and services and transforming the culture to enhance customers' experiences and increase NB Power's value to the customer.

NB Power works hard every day to provide safe, reliable and sustainable electricity for customers. During fiscal year 2022/23 NB Power will perform scheduled maintenance on Point Lepreau Nuclear Generating Station and Belledune Generating Station. Investments will be made in the Bayside, Tobique and Nepisiguit Falls generating stations to replace or refurbish major components which will result in improved reliability, increased production and the addition of more renewable energy to the grid. NB Power will also continue modernizing and hardening the distribution and transmission systems to ensure customers have the power they need when they need it.

Critical to New Brunswick's energy future is a modern grid that is multi-directional and capable of accommodating connected renewable energy resources such as solar and wind. Improvements such as Advanced Metering Infrastructure, Smart Grid Atlantic and the Advanced Distribution Management System projects will provide customers real-time information to help guide their energy usage, increase customers' options to best use energy in the future, help the region reduce emissions and allow NB Power to manage and maintain a safe and reliable grid. NB Power is testing and evolving flexible strategies such as demand response and battery storage to offset variability associated with renewables instead of using fossil-fuelled power plants to steady the power grid.

Mitigating the impacts of climate change is a key area of focus for all utilities. NB Power maintains a robust and diverse energy system that is approximately 80 per cent non-emitting. Continuing to reduce New Brunswick's carbon footprint, maintaining NB Power's infrastructure to withstand the impacts of severe weather and adopting emerging technologies will shape the future of energy in the province.

To achieve these strategic objectives, NB Power is transforming its culture to provide an enviable customer experience as customers' needs evolve and change with the evolving energy landscape. NB Power is adapting and evolving its employee working model and organizational culture to continue to attract and retain employees, support employee well-being and create and sustain a culture of excellence.

NB Power is also managing risks that may impact its ability to achieve the utility's strategic objectives through its Enterprise Risk Management Program, which consists of systematic, proactive and integrated processes to identify, understand, manage and communicate risks. Corporate strategy and goals serve as the foundation of all risk management activities and the Board of Directors sets the overall risk appetite and tolerances for the Corporation.

The Enterprise Risk Management process employs a consistent methodology across the organization that results in a comprehensive view of risk that is regularly reported to management and the Board. By embedding risk management techniques in day-to-day operations, NB Power is better equipped to identify risks affecting its goals and to manage risks in ways that are consistent with the company strategy.



## STRATEGIC EXCELLENCE AREAS

NB Power's strategic excellence areas are Safety, Customer, Organizational, Reliability and Environmental (SCORE). Generation, Nuclear, Transmission, Distribution, Customer Service and Corporate Services take innovative approaches and engage in continuous improvement to support progress in the five excellence areas.

NB Power has established as part of this plan enterprise key performance indicators to provide visibility into NB Power's performance. In each of NB Power's excellence areas, management has determined the goals, initiatives, processes, measures and attributes required to pursue excellence based on relevant internal or external industry performance comparisons.

NB Power will continue to measure and report performance against targets.

Key Performance Indicators	2022/23 Target
<b>Safety Excellence</b>	
Total Recordable Injury Frequency (TRIF) Rate	0
<b>Customer Excellence</b>	
Customer Satisfaction Score	≥712
<b>Organizational Excellence</b>	
Net Earnings (\$ millions)	40
Change in Net Debt (\$ millions)	67
Net Capital Expenditures (\$ millions)	426
Operation, Maintenance and Administration (OM&A)	537
<b>Reliability Excellence</b>	
Nuclear Capacity Factor (%)	77.6
Hydro Long-term Average (%)	100
System Average Interruption Frequency Index (SAIFI)	2.04
System Average Duration Frequency Index (SAIDI)	5.20
<b>Environmental Excellence</b>	
Non-Emitting Generation (%)	75 <sup>a</sup>
Greenhouse Gas Reduction as a Result of Internal Demand Reduction (tonnes)	200
Investments in energy efficiency programs	\$38.7 million

<sup>a</sup> Reflects outage year at the Point Lepreau Nuclear Generating Station

## Safety Excellence

NB Power wants employees to work safely and go home to their loved ones every day, so its most aspirational goal is its safety goal of zero employee injuries. Since working around electricity is inherently hazardous, NB Power mitigates the hazards with training programs, policies and processes to ensure safe practices. NB Power's commitment to continue to support employees' physical safety and wellbeing is more critical than ever. The company's relentless focus on safety extends to ensuring the wellbeing of NB Power contractors and the public.

Key Performance Indicators	2022/23 Target
<b>Safety Excellence</b>	
Total Recordable Injury Frequency (TRIF) Rate	0

### Strategic Approach

NB Power's strategic approach to Safety Excellence is established in its Total Health Strategy to maintain focus on reducing preventable illness, the risk for accidents and injury, containing health-care costs and building resiliency in the workforce. In support of this strategic approach, NB Power will

- implement phase two of the Mental Health strategy, including
  - mental health first aid training for leaders
  - mental health recovery plan post-pandemic for employees
  - continued support through the NB Power Help Line
- complete a third-party audit of the Health and Safety Management system and implement the action plan to address audit findings

### 2022/23 Initiatives

To achieve the 2022/23 target for Safety Excellence, NB Power will

- implement in partnership with the University of New Brunswick a preventive program that will address the occurrence of soft tissue injuries and result in a reduction in the Total Recordable Injury Frequency Rate
- execute the Operations Safety Improvement Plan

## Customer Excellence

Customer Excellence means putting the customer experience at the centre of everything NB Power does. NB Power is committed to being “easy to do business with” and working with its customers to find the energy solutions that work best for them.

Key Performance Indicators	2022/23 Target
<b>Customer Excellence</b>	
Customer Satisfaction Score	≥712

## Strategic Approach

NB Power is undertaking a long-term strategic approach to Customer Excellence by undertaking a number of long-term strategic initiatives, including

- implementing advanced metering infrastructure
  - provides customers with near real-time information on their energy use, empowering customers to understand how and when they are using electricity so they can make behavioural changes to lower their overall usage
  - enables customers to leverage distributed energy resources, generate and store their own energy and support our efforts to reduce and shift electricity demand
- advancing the Smart Grid Atlantic project with the installation and testing of technologies related to emerging technologies in the energy industry

## 2022/23 Initiatives

To achieve its target for Customer Excellence in 2022/23, NB Power will

- begin a phased deployment of smart meters to NB Power customers
- improve customer care technology by offering additional methods of communication such as SMS/text and self-serve options

## Organizational Excellence

Organizational Excellence focuses on establishing the long-term financial health of NB Power, transforming the organization's culture to demonstrate increased value to the customer and enabling the safeguarding of assets. Financial health is a critical focus area and will involve using best practice information to complete internal improvements and using new technologies to improve productivity, reduce costs and increase value for customers. This area also includes enabling initiatives that help the business achieve results in all areas.

Key Performance Indicators	2022/23 Target
<b>Organizational Excellence</b>	
Net Earnings (\$ millions)	40
Change in Net Debt (\$ millions)	67
Net Capital Expenditures (\$ millions)	426
Operation, Maintenance and Administration (OM&A)	537

## Strategic Approach

As part of its long-term strategic approach to Organizational Excellence, NB Power will

- develop and implement strategies to increase NB Power's ability to meet financial targets through a renewed commitment to continuous improvement initiatives and new revenue streams
- increase revenue from existing programs such as SureConnect and upcoming pilot offerings, including home electric vehicle chargers and smart lighting
- develop a strategic, financial and investment plan and file an application for electricity rates
- develop and implement a cultural framework plan that transforms the organizational culture to demonstrate increased value for customers

## 2022/23 Initiatives

To achieve its Organizational Excellence targets in 2022/23, NB Power will

- sustain operational efficiencies gained from the implementation of digital office technology, mobility-based apps and Microsoft 365 collaboration toolset
- invest in tools that ensure the protection of NB Power digital assets, including physical devices, software, network infrastructure, cloud infrastructure and the digital information that is stored, transmitted or processed within these assets and maintain the highest level of security for NB Power people, assets and facilities

## Reliability Excellence

NB Power operates and maintains a diverse generation, transmission and distribution infrastructure. In order to sustain high levels of safe and reliable performance NB Power needs to regularly and strategically invest in infrastructure.

Key Performance Indicators	2022/23 Target
<b>Reliability Excellence</b>	
Nuclear Capacity Factor (%)	77.6
Hydro Long-term Average (%)	100
System Average Interruption Frequency Index (SAIFI)	2.04
System Average Duration Frequency Index (SAIDI)	5.20

## Strategic Approach

As part of its long-term strategic approach to Reliability Excellence, NB Power will

### **Nuclear**

- reduce costs and help bridge the gap to top decile performance by fostering and engaging all Nuclear employees in a Culture of Prevention
- improve equipment reliability at Point Lepreau Nuclear Generating Station (PLNGS) using an industry-standard approach to preventative maintenance and ongoing investments in equipment improvements, upgrades and replacements to transition to a 24-month outage cycle
- reduce maintenance backlogs at PLNGS with a specific focus on deficient critical orders
- develop life cycle management plans for all critical equipment to the end-of-plant life at PLNGS and integrate those activities in the Station's plant life capital plan and maintenance strategies
- execute the multi-year obsolescence and critical spares initiative at PLNGS to re-establish an accurate and robust critical spare parts inventory for improved safety and reliability

### **Operations**

- implement generation reliability improvement plan initiatives
- replace the gas turbine and generator at the Bayside Generating Station to increase production and reduce emissions
- refurbish/replace all major components of Tobique Generating Station Unit 2 to assure long-term station reliability
- refurbish/replace all major components of Nepisiquit Falls Generating Station Unit 1 to assure long-term reliability and increase the renewable energy provided to the grid
- leverage GIS- and LIDAR-based technologies to optimize vegetation management programs and interventions
- modernize the distribution system through the use of more connected devices to improve system visibility and operability
- expand the use of real-time data analytics software that connects data points to monitor asset condition

## 2022/23 Initiatives

To achieve its Reliability Excellence targets in 2022/23, NB Power will

- execute the PLNGS maintenance and inspection outage, which will include replacing a high-pressure rotor, inspecting the generator, overhauls to the turbine valve, replacement of the primary heat transport rotating element and seal and testing the reactor building leak rate
- execute planned maintenance and inspection outages at
  - Belledune Generating Station
  - Coleson Cove Generation Station Unit 1
  - Grand Manan Generating Station
  - Millbank Generating Station
  - hydro generating stations
- ensure storm restoration efforts are expedited safely and efficiently
- re-establish appropriate vegetation clearances on distribution and transmission rights-of-way to reduce vegetation-caused interruptions
- improve transmission reliability by replacing structures, crossarms and insulators on 69kV and 138kV lines and re-galvanizing some steel structures on the 138kV system



## Environmental Excellence

Environmental Excellence focuses on NB Power's response to climate change. It includes efforts to make us a leader in carbon emission reduction and more resilient to extreme weather events. This includes transitioning towards cleaner electricity production, including renewables, to reduce carbon emissions and the promotion of efficient use of electricity through internal and external programs. Targets include short-, medium- and long-term actions to ensure sustainable operations for future generations.

Key Performance Indicators	2022/23 Target
<b>Environmental Excellence</b>	
Non-Emitting Generation (%)	75 <sup>a</sup>
Greenhouse Gas Reduction as a Result of Internal Demand Reduction (tonnes)	200
Investments in energy efficiency programs	\$38.7 million

### Strategic Approach

As part of its long-term strategic approach to Environmental Excellence, NB Power will

- progress the Mactaquac Life Achievement Project to operate the Station to approximately 2068 by finalizing the scope of work and preparing for the regulatory process
- work with and support the New Brunswick small modular reactor vendors in the development of their advanced technologies
- work with business owners and municipalities to install customer-owned EV charging stations
- reduce NB Power's internal energy consumption through the optimization of generating stations and other facilities
- leverage as distributed energy resources product offerings such as LED lighting and Eco-Peak domestic hot water heaters

### 2022/23 Initiatives

To achieve its Environmental Excellence targets in 2022/23, NB Power will

- implement demand side management programs to serve residential, commercial, and industrial electricity customers
- invest in incentives for non-electric fuel and electricity customers, the Business Rebate Program for commercial customers, and in low-income energy savings program
- implement programs that incent New Brunswickers to purchase new or used electric vehicles
- install over 50 charging stations at NB Power facilities to allow for further electrification of its fleet

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<sup>a</sup> Reflects outage year at the Point Lepreau Nuclear Generating Station

## ATTACHMENT A – MEASURE DEFINITIONS

Key Performance Indicator	Definition
<b>Safety Excellence</b>	
Total Recordable Injury Frequency	Number of Fatalities + Number of Lost-Time Injuries + Number of Medical Aids + Loss of Consciousness + Restricted Work + First Aid x 200,000/ Exposure Hours
<b>Customer Excellence</b>	
Customer Satisfaction Score	<b>Residential</b> Customer Satisfaction Index. East Midsize category. The index measures the following factors: power quality & reliability, price, billing & payment, corporate citizenship, communications, customer service.
<b>Organizational Excellence</b>	
Net Earnings (\$)	Revenue less fuel and purchased power, OM&A, depreciation and amortization, taxes, finance charges, other income, profit/loss investments and regulatory balances
Change in Net Debt (\$)	Tracks the increase or decrease in the net debt balance
Net Capital Expenditures (\$)	Capital investments less customer contributions and grants
OM&A	Total operations, maintenance, and administration spending
<b>Reliability Excellence</b>	
Nuclear Capacity Factor (%)	The ratio of the energy which the power reactor unit has produced over a specific period divided by the energy it would have produced at its reference power capacity over that period
Hydro Long-Term Average (%)	The long-term hydro values are the 50% probability of occurrence of hydro energy production adjusted for known unit outages
System Average Interruption Frequency Index (SAIFI)	Average Number of Interruptions in power (based on three-year average 2019-21)
System Average Interruption Duration Index (SAIDI)	Average number of hours customers were without power (based on three-year average 2019-21)
<b>Environmental Excellence</b>	
Non-Emitting Generation (%)	Total of all non-emitting generation and purchases as a percentage of In-province load
Greenhouse Gas Reduction as a Result of Internal Demand Reductions (Tonnes)	Equivalent annual greenhouse gas reduction as a direct result of NB Power's Internal Demand Reduction efforts
Investments in energy efficiency programs	The total dollars invested in energy efficiency programs



## ATTACHMENT B – FINANCIAL HIGHLIGHTS

Financial Highlights Fiscal Year Ending March 31 (\$ millions)	Budget 2022/23
(1) In-province revenue	1,511
(2) Out-of-province revenue	235
(3) Fuel and purchased power expense	660
(4) Gross margin	1,086
(5) Miscellaneous revenue	81
(6) Operation, maintenance & administration	537
(7) Depreciation and amortization	343
(8) Taxes	54
(9) Operating earnings	234
(10) Finance charges and other income	(227)
(11) Mark-to-market of fair value through profit and loss investments	46
(12) Net earnings before adjustments in regulatory balances	53
(13) Net changes in regulatory balances	(13)
(14) Net earnings	40
(15) Capital expenditures (net)	426
(16) Net debt	4,970
(17) Change in net debt	67
(18) % Debt in capital structure	92%

*\*Financial table sums may reflect differences due to rounding*