

A Comparative Analysis of the Legislated Electricity Regimes in New Brunswick and Nova Scotia

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Introduction

1. Overview of the Report

This report examines the core aspects of the legislated electricity regimes in New Brunswick and Nova Scotia. Its primary purposes are to:

- provide comparative overviews of the legislated electricity regimes in New Brunswick and Nova Scotia, taking federal considerations into account as necessary; and,
- analyze the electricity mandates of New Brunswick's Energy and Utilities Board ("EUB") and Nova Scotia's Utility and Review Board ("UARB") and assess the approaches that each Board takes when interpreting its role as an electricity regulator.

To accomplish these objectives, the report contains three parts.

Part A provides an overview of federal GHG emissions reduction initiatives that bear directly on the legislated electricity regimes in New Brunswick and Nova Scotia and briefly addresses the federal regime that regulates nuclear energy generation in Canada.

Part B and Part C focus respectively on the legislated electricity regimes in New Brunswick and Nova Scotia, and they:

- identify the statutes and regulations that are most relevant to the provincial regimes, grouping those statutes and regulations thematically so that the relationships between them are clear;
- provide targeted issue analyses designed to identify the legal structures that create opportunities for renewable electricity initiatives, along with the legal structures that create barriers to such initiatives, in each province; and,
- assess the powers, duties, and electricity mandates of the EUB and UARB, respectively.

In both New Brunswick and Nova Scotia, the generation, transmission, and distribution of electricity is carried out within a vast legislative context, and a wide array of processes under multiple pieces of federal and provincial legislation may have bearing on electric utilities' operations at any given time. This report does not attempt to address every statute and regulation that has some bearing on each electricity regime, however peripheral: instead, it focuses primarily on the statutes, regulations, and procedural rules that contribute directly to the core aspects of the legislated electricity regimes in each province. Additionally, the report focuses mainly on the primary power players in each province: New Brunswick Power Corporation ("NB Power" or the "Corporation") and Nova Scotia Power Incorporated ("NSPI").

2. Affordability, Reliability, Sustainability

Three themes are particularly relevant to this report: affordability, reliability, and sustainability. Commentary on these themes appears throughout the targeted issue analyses that appear in Part B and Part C, and several key points emerge.

(a) Affordability

Under New Brunswick's <u>*Electricity Act*</u>, the EUB has an obligation to ensure that the rates and transmission tariffs set by NB Power are "just and reasonable". Nova Scotia's <u>*Public Utilities Act*</u> gives the UARB the same responsibility. In each regime, the prices that will be considered just and reasonable for electricity consumers are conditioned by the respective returns that are deemed to be just and reasonable for NB Power and NSPI.

In response to advocacy efforts by the Dalhousie Legal Aid Service and affordable energy advocates in Nova Scotia, the UARB has determined that it has no authority to implement rate-assistance programs that would make electricity more affordable for low-income ratepayers in Nova Scotia. In fact, the UARB's view is that Nova Scotia's *Public Utilities Act* actually prohibits the Board from implementing such programs, as the Act obliges the Board to ensure that like rates are paid for like services. The Nova Scotia Court of Appeal ("NSCA") has affirmed the Board's approach in this regard.

Although the UARB has determined that it cannot implement rate-assistance programs for low-income ratepayers, Nova Scotia's efficiency franchise is not barred from conducting energy efficiency and conservation activities that target low-income ratepayers, nor is NSPI barred from using ratepayer funds to pay for such activities. This stands in stark contrast to the current state of affairs in New Brunswick, where the EUB has held that NB Power cannot develop and deliver energy efficiency, energy conservation, and DSM programs and initiatives for low-income homeowners unless such programs and initiatives are paid for by the province.

Notably, Nova Scotia's UARB is required to assess the affordability of proposed energy efficiency and conservation activities, and it has determined that the word "affordable", in the context of such analyses, requires it to give careful attention to short-term costs to ratepayers as well as long-term costs and benefits.

(b) Reliability

Section 71 of New Brunswick's *Electricity Act* requires NB Power to maintain a reliable integrated electricity system. The EUB bears the primary responsibility to approve and enforce reliability standards, and various requirements for those standards are set out in the *Electricity Act* and its corresponding *Reliability Standards Regulation*. Under the *Reliability Standards Regulation*, NB Power and the EUB are expected to apply the standards approved by the Federal Energy Regulatory Commission of the United States of America ("FERC"), although those standards may be modified as necessary.

Section 52 of Nova Scotia's *Public Utilities Act* requires every public utility to "furnish service and facilities reasonably safe and adequate and in all respects just and reasonable". The word "reliable" is not used specifically in the Act. NSPI is subject to the reliability standards developed by the North American Electric Reliability Corporation (NERC") and the Northeast Power Coordinating Council, Inc. ("NPCC"). The NPCC monitors NSPI's compliance with those standards, and the UARB has power and responsibility to enforce NSPI's compliance. Additionally, amendments to the *Public Utilities Act* in 2015 required the UARB to establish and enforce performance standards for NSPI addressing "reliability", "response to adverse weather conditions", and "customer service". The UARB established those standards in 2016.

Our research indicates that New Brunswick's legislated electricity regime, including applicable standards approved by the FERC, does not include a performance standard for adverse weather response that is equivalent to the one the Government of Nova Scotia and the UARB have imposed on NSPI.

(c) Sustainability

Subsection 3(1) of New Brunswick's *Electricity from Renewable Resources Regulation* requires NB Power to ensure that on December 31, 2020, 40% of electricity sold in the province is electricity from renewable sources. The regulation does not impose increasingly ambitious targets beyond 2020, and so the 40% target will remain in place through 2021 and beyond unless the regulation is amended.

Under the *Electricity from Renewable Resources Regulation*, "electricity from renewable sources" could mean electricity that comes from solar energy, wind energy, hydroelectric energy, ocean-powered energy, biogas energy, biomass energy, or sanitary landfill gas. Electricity from other sources could also be characterized as renewable if that electricity is generated within New Brunswick "in an innovative manner" and if it provides "a net environmental benefit" to the province.²

With respect to sustainable electricity sourcing, generation, and usage, New Brunswick's goals are also supported by NB Power's responsibility to develop and deliver energy efficiency, energy conservation, and demand-side management ("DSM") programs and initiatives in accordance with requirements imposed by the *Electricity Act*.

A significant sustainability issue that arises in New Brunswick but not in Nova Scotia concerns New Brunswick's current and anticipated future use of nuclear-generated electricity. NB Power is currently positioning nuclear energy as a relatively "clean" source of electricity that will help to support the province's transition away from electricity derived from fossil fuels.

Subsection 6A(1) of Nova Scotia's <u>Renewable Electricity Regulations</u> states: "Each year beginning with the calendar year 2020, each load-serving entity must supply its customers with renewable electricity in an amount equal to or greater than 40% of the total amount of electricity supplied to its customers as measured at the customers' meters for that year". The regulation does not impose increasingly ambitious targets beyond 2020, and so the 40% target will remain in place indefinitely unless the regulation is amended.

Relevant statutes and regulations in Nova Scotia categorize three noteworthy forms of electricity: "renewable electricity", "renewable low-impact electricity", and "low-emissions electricity". Renewable low-impact electricity is a sub-category of renewable electricity, and Nova Scotia's *Renewable Electricity Regulations* define it as including electricity produced from solar energy, wind energy, run-of-the-river hydroelectricity, ocean-powered energy, tidal energy, wave energy, biomass that has been harvested in a sustainable manner, landfill gas, and ""any resource that, in the opinion of the Minister and consistent with Canadian standards, is able to be replenished through natural processes or through sustainable management practices so that the resource is not depleted at current levels of consumption".³ On the whole, Nova Scotia's characterization of "renewable low-impact electricity" is quite similar to New Brunswick's characterization of "electricity from renewable resources", although significant differences between the two categories exist.

² See section 2.

³ See subsection 3(1).

With respect to sustainable electricity sourcing, generation, and usage, Nova Scotia's goals are also supported by NSPI's obligation to pay for energy efficiency and conservation activities that are provided by the provincial efficiency franchise, which is currently EfficiencyOne.

Additionally, in both New Brunswick and Nova Scotia, statutes and regulations have been used to create programs designed to incent private investment in small-scale renewable electricity generation and to facilitate or require purchases by NB Power and NSPI, respectively, of electricity generated in that manner.

3. Regulating in the "Public Interest"

Another theme that is especially relevant to this report is a core responsibility that the EUB and UARB each hold, and that is the responsibility to regulate in the public interest. Commentary on this theme emerges primarily in the sections in Part B and Part C that assess the respective powers and duties of the EUB and UARB and discuss special issues of concern. Here, some introductory comments aim to contextualize the analyses and conclusions that appear below.

The EUB has interpreted New Brunswick's *Electricity Act* as giving it an overarching mandate to ensure that all of its orders and decisions are made with the public interest in mind.⁴ The UARB likewise understands itself to have "an over-arching public interest mandate in everything it does".⁵

Depending on the context in which it is used, the term "public interest" could mean a great many things. Although several attempts have been made to persuade the UARB to adopt capacious interpretations of its public-interest mandate—interpretations that would take into account social justice and equity considerations, environmental concerns, and non-energy benefits of various kinds, for example—Nova Scotia's electricity regulator understands the public interest to mean, primarily, the financial interests of NSPI's ratepayers. In New Brunswick, the EUB appears to take the same financially-minded approach.

The EUB and UARB are administrative bodies that were created and empowered by statute, and, in law, their powers are limited to the powers that their respective governments have chosen to give them. This makes the express language of their enabling statutes and regulations terribly important, as each Board is expected to take direction from relevant legislation when carrying out its responsibilities and conducting its affairs.

The statutes and regulations that empower the EUB and UARB do not expressly limit the Boards' respective public-interest mandates to financial considerations, and so it may be argued—as some *have* argued—that the Boards should take more expansive views of the public interest into account when approving or fixing electricity rates or assessing the investments that utilities can and should make in energy efficiency, energy conservation, and DSM programming. However, even though the relevant statutes and regulations do not explicitly limit the Boards' public-interest mandates to financial considerations, the legislated electricity regimes in both New Brunswick and Nova Scotia seem designed on the whole to protect provincial ratepayers from inordinate electricity costs while ensuring that essential generation, transmission, and distribution systems are properly maintained. Cost

⁴ Energy and Utilities Board, NB Power 2018-2019 General Rate Application (Matter 0375) Decision at paragraph 75 ["EUB Matter 0375 Decision"].

⁵ Efficiencyone (Re), 2020 NSUARB 56 (CanLII) at paragraph 34 ["Efficiencyone (Re) 2020"].

considerations come up frequently in the legislation, and the electricity regulators' historical roles have long involved looking out for electricity customers' pocketbooks.

To a significant degree, the EUB and UARB understand their contemporary roles through the lenses of the long histories that have informed their activities. To the extent that the concerns of today have altered the Boards' roles and given them new responsibilities to support provincial efficiency goals, renewable electricity targets, or climate change preparedness, those responsibilities have been created expressly by amendments to the statutes and regulations that empower the Boards and define what they do. And, to the extent that such amendments are not entirely clear about the Boards' new roles and responsibilities, the Boards may be expected to interpret their new obligations in ways that bring those obligations in line with their established duties and powers. In other words, the Boards take a conservative approach to the ongoing evolution of their jurisdictions and mandates.

In Nova Scotia, a number of decisions by the UARB—along with some corresponding decisions by the NSCA—usefully illustrate how the Board's public-interest mandate is currently understood by the Board itself and the province's highest court.

In 2018, Nova Scotia's efficiency franchise, EfficiencyOne, applied to the UARB for approval to include non-energy benefits in testing to assess the cost-effectiveness of future DSM programming. Examples of the non-energy benefits that EfficiencyOne had in mind for residential customers included "thermal comfort", "noise reduction", and "property value", and benefits for business, non-profit, and institutional customers included "reduced operations and maintenance", "reduction in other labour costs", and "reduction in waste disposal".⁶ The UARB doubted that it had jurisdiction to take non-energy benefits into account when considering the interests of NSPI's ratepayers—more specifically, it doubted that the *Public Utilities Act* gave it authority to take non-energy benefits into account when assessing the cost-effectiveness of DSM programming—and it requested arguments on that point.

EfficiencyOne noted that the *Public Utilities Act* requires the UARB to consider what is in "the best interests" of NSPI's customers when assessing the cost-effectiveness of DSM programming, and it argued that because the phrase "best interests" is not limited by the statute or other relevant legislation, the law permits the UARB to engage in "a cumulative consideration of the diverse interests of the customer" and to take into account an "unrestrictive range of costs and benefits".⁷ EfficiencyOne also argued that the recent history of legislative amendments to the *Public Utilities Act* demonstrated "a legislative intention for the Board to account for a broader environmental context when considering the best interests of customers".⁸

Ultimately, the UARB rejected these arguments.

In its written decision—archived as <u>Efficiencyone (Re)</u>, 2020 NSUARB 56 (CanLII) ("Efficiencyone (Re) 2020")—the UARB cited with approval a passage from a 2006 decision by the Supreme Court of Canada, which states:

...<u>The Board's seemingly broad power to make any order and to impose any additional</u> conditions that are necessary in the public interest has to be interpreted within the entire context of the statutes which are meant to balance the need to protect consumers as well as the property

⁶ Efficiencyone (Re) 2020, supra note 4 at paragraph 5.

⁷ *Ibid* at paragraph 35.

⁸ *Ibid* at paragraph 36.

rights retained by owners, as recognized in a free market economy. <u>The limits of the powers of the Board are grounded in its main function of fixing just and reasonable rates ("rate setting)</u> and in protecting the integrity and dependability of the supply system. (emphasis added by the Board)⁹

In other words, whereas EfficiencyOne argued that the "best interests" of NSPI's customers, in relation to DSM programming, may include a wide range of interests, including interests connected to environmental concerns, the UARB interpreted its jurisdiction much more narrowly, holding that its powers with respect to the public interest are rooted in, and limited by, its fundamental duty to balance consumers' financial interests against NSPI's financial needs.

The UARB's interpretation of its jurisdiction in *Efficiencyone (Re) 2020* echoes earlier decisions in which the Board has characterized its jurisdiction and mandate within the context of its duty to regulate a monopoly. In <u>Nova Scotia Power Inc, Re, 2005 NSUARB 27 (CanLII)</u>, the Board stated:

NSPI is not like an unregulated retailer. It is a virtual monopoly which operates its business on a cost-of-service basis. Providing electricity to all communities in the Province was not (and likely still is not) financially feasible for private, competitive companies. For that reason, the Province's electric service supplier is a cost-of-service monopoly. In return for undertaking and continuing the costs of electrification of the Province, the Utility is permitted, under the Act, to recover the reasonable and prudent costs of providing this service. Because it is a monopoly, regulation operates as a surrogate for competition. One of the regulator's tasks is to balance the need for the Utility to recover its reasonable and prudent costs with the need to ensure that ratepayers are charged fair and reasonable rates. (emphasis added)¹⁰

In a subsequent decision that concerned the UARB's lack of jurisdiction to implement a rate assistance program for low-income customers, the Board referred back to the passage cited above, and added:

Electricity is an essential service. The cost of providing electricity to all areas of the province is in excess of \$1 billion per year. These costs are passed on to each category of ratepayer (e.g., residential, small commercial, industrial, etc.). In order to protect the public interest, the Board must ensure that NSPI, a monopoly providing an essential service to the public, does not abuse its monopoly status by overcharging its customers as a whole or any customer in particular. (emphasis added)¹¹

Together, these passages indicate that the UARB consistently interprets its public-interest mandate as emerging primarily from its responsibility to protect ratepayers' financial interests by acting as the regulatory surrogate for the competitive free-market forces that would ostensibly protect consumer interests if NSPI were not a monopoly. To the extent that the Board must take other considerations into account when regulating NSPI and the other utilities under its supervision, the Board looks for explicit direction from government, as expressed by clear terms set out in relevant statutes and regulations. The NSCA has affirmed the UARB's approach in this regard.¹²

⁹ *Efficiencyone (Re) 2020, supra* note 4 at paragraph 40.

¹⁰ <u>Nova Scotia Power Inc, Re, 2005 NSUARB 27 (CanLII)</u> at paragraph 17.

¹¹ Affordable Energy Coalition (Re), 2008 NSUARB 11 (CanLII) at paragraph 118.

¹² See *Boulter v Nova Scotia Power Incorporation*, 2009 NSCA 17 (CanLII) and *Dalhousie Legal Aid Service v Nova Scotia Power Inc*, 2006 NSCA 74 (CanLII).

Our research did not discover decisions by New Brunswick's EUB or the New Brunswick Court of Appeal that could offer similar insights into the EUB's reasoning with respect to its own obligation to regulate in the public interest. Despite certain significant differences between the legislated electricity regimes in New Brunswick and Nova Scotia, it would be reasonable to assume that much of the UARB's understanding of its jurisdiction and mandate accords with the EUB's understanding of its own powers and responsibilities. One particularly significant difference, of course, is the fact that NSPI is privately owned but publicly regulated, and NB Power is a Crown corporation. That being the case, the UARB's vision of itself as a regulatory surrogate for a competitive, free-market economy may not translate perfectly for the EUB. Nevertheless, the reality is that the EUB, like the UARB, appears to base its public-interest decision-making on financial cost considerations primarily, and the express language of New Brunswick's *Electricity Act* overall, like the language of the applicable legislation in Nova Scotia, tends to support the Board in that approach.

What does all of this mean for progressive public-interest advocacy before the EUB and UARB? For one thing, it suggests that under the current regimes in New Brunswick and Nova Scotia, advocacy efforts will have greater chances of success if they demonstrate that public-interest considerations such as environmental sustainability, climate change mitigation and adaptation, and equitable access to energy efficiency, energy conservation, and DSM programming are valuable from the perspective of ratepayers' financial interests. In other words, knowing how to navigate the playing field as it stands today can help advocacy organizations to engage more strategically. However, understanding that the EUB and UARB are bound by their enabling statutes and regulations and that the Boards' perspectives are shaped significantly by their long-established approaches also highlights the importance of using law-reform advocacy to press for progressive change. When it comes to the matters that are at issue in this report—affordability, reliability, and sustainability, as seen through the lenses of environmental and climate necessity—neither the EUB nor the UARB are likely to interpret their jurisdictions and mandates more expansively than their relevant statutes and regulations require. Ultimately, the provincial governments, more so than the regulators, are best placed to implement progressive changes to their legislated electricity regimes.

Part A: Impacts of Federal Government Powers

1. Introduction

When it was enacted more than 150 years ago, Canada's <u>Constitution Act, 1867</u> identified the spheres of authority that would belong to the federal and provincial governments and divided those governments' powers accordingly. Environmental protection and climate change considerations were not on the list, however, and so governments in Canada have worked—sometimes collaboratively, and sometimes antagonistically—to define their respective powers to implement environmental protections and measures to mitigate climate change.

In many circumstances, "the environment" is understood to be an area of shared jurisdiction, meaning that the federal, provincial, and territorial governments, along with Indigenous governments throughout the country, often have shared and intersecting roles to play. The <u>Canadian Environmental Protection</u> <u>Act, 1999</u> ("CEPA"), a key piece of federal environmental legislation in Canada, recognizes that constitutional reality. With an eye to the practical realities of shared jurisdictions over many issues of environmental concern, many of the binding legal obligations that CEPA imposes on the Government of Canada were designed to recognize and accommodate the sometimes-uncertain limits of the federal government's powers in relation to provincial powers. Notably, the administrative duties imposed on the Government of Canada under section 2 of CEPA are conditioned expressly by the Constitution and the laws of Canada, and although they require the federal government to "establish nationally consistent standards of environmental quality", they also require it to "endeavour to act in cooperation with government".¹³

In 2012, the federal government used its powers under *CEPA* to implement a regulatory initiative that had significant implications for the electricity sectors in New Brunswick and Nova Scotia in particular. That initiative was the creation of the <u>Reduction of Carbon Dioxide Emissions from Coal-fired</u> <u>Generation of Electricity Regulations</u>, which will be referred to as the <u>Coal-fired Electricity</u> <u>Regulations</u> throughout the remainder of this report. Section 2 of this part of the report explains the nature of those regulations and their significance to the legislated electricity regimes in New Brunswick and Nova Scotia. In addition, Section 2 describes the legislative foundations of the <u>Canada-Nova Scotia</u> <u>Equivalency Agreement for the Control of Greenhouse Gas Emissions from Electricity Producers in Nova Scotia</u> (which will be referred to as the Canada-Nova Scotia Equivalency Agreement or the "current Equivalency Agreement" throughout the remainder of this report) and describes the legislative foundations of that agreement.

In recent years, high-profile challenges to the federal government's power to impose a national carbon tax have been testing the limits of the Government of Canada's constitutional authority to take unilateral action to mitigate climate change. Recent decisions by the Courts of Appeal in Ontario and Saskatchewan have recognized the federal government's authority to impose a carbon tax, whereas the Alberta Court of Appeal has held that the federal carbon tax is unconstitutional. These matters are expected to go before the Supreme Court of Canada ("SCC") later this year. Although the future of the federal carbon tax may be somewhat uncertain until the SCC considers the matter and delivers a decision, the Governments of New Brunswick and Nova Scotia are each cooperating with the federal carbon pricing system, and that system has therefore affected the legislated electricity regimes within

¹³ See subsections 2(1)(g) and 2(1)(d).

each province. Section 3 of this part of the report offers brief commentary on the direct implications of the federal carbon pricing system for New Brunswick and Nova Scotia.

In Canada, nuclear energy generation is regulated primarily at the federal level. New Brunswick currently has one nuclear generation facility that contributes to the provincial electricity supply, and in recent years the provincial government has demonstrated its interest in using small modular reactors ("SMRs") to provide relatively "clean" electricity that will support the provincial transition to a low-carbon electricity supply. Section 4 of this part of the report briefly addresses the regulatory processes that may have bearing on the proposed development of SMRs intended for use in New Brunswick.

2. Federal Regulation of CO₂ Emissions

(a) Background

In August 2012, the Government of Canada created the *Coal-fired Electricity Regulations* to reduce carbon dioxide (CO₂) emissions created by coal-fired electricity generation. The regulations impose a performance standard that requires regulated coal-fired electricity generation units to lower their CO₂ emissions to a target level within prescribed timeframes. The regulations have been amended three times since they were created, with the current version requiring all regulated coal-fired electricity generation units to comply with the performance standard by December 31, 2029 at the latest. The intended effect of the regulations is to achieve a complete transition away from coal-fired electricity generation, and it is expected that most coal-fired electricity generation facilities will either be retired before 2030 or converted to generate electricity using other fuel sources, such as natural gas, in the absence of equivalency agreements allowing otherwise.

Recognizing the industry's likely use of natural gas as an alternative fuel source, the Government of Canada's most recent amendments to the *Coal-fired Electricity Regulations* were complemented by the creation of an entirely new set of regulations, called the *Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity* (referred to as the *Natural Gas-fired Electricity Regulations* throughout this report). The *Natural Gas-fired Electricity Regulations* impose CO₂ emissions limits on electricity generation facilities that are fuelled by natural gas and create a distinct regime for boiler units that were previously registered under the *Coal-fired Electricity Regulations*, converted boiler units fuelled by natural gas will be allowed to operate for a period of time—in some cases, up to ten years—without meeting the performance standard set out in the regulations.

The flexibility that the federal government has built into the *Natural Gas-fired Electricity Regulations* reflects the flexibility that the Government of Canada has demonstrated in its regulatory approach to its coal-fired electricity phase-out on the whole. When the first *Coal-fired Electricity Regulations* were proposed, certain provinces suggested that the federal government should enter into equivalency agreements that would restrict the application of the federal regulatory regime in provinces where enforceable provincial regimes would produce equivalent environmental outcomes. At the time, the Government of Canada recognized that such equivalency agreements could be established under *CEPA*, and it indicated that it might consider them once the proposed regulations were in force.¹⁴ The

¹⁴ Government of Canada, *Canada Gazette Part 1* (27 August 2011), Volume 145: Number 35 at page 2836.

government subsequently demonstrated its willingness to enter into equivalency agreements with provinces.

Understanding the legal bases for such equivalency agreements requires a foundational understanding of the federal government's power to create and enforce the *Coal-fired Electricity Regulations* themselves. The next subsection therefore provides a brief summary of the federal government's relevant regulation-making powers before going on to discuss the Canada-Nova Scotia Equivalency Agreement in more detail.

(b) Legal Foundations of the Coal-fired Electricity Regulations and the Canada-Nova Scotia Equivalency Agreement

The federal government's power to create the *Coal-fired Electricity Regulations* comes from subsection 93(1) of *CEPA*, which appears in the part of the Act that governs the control of toxic substances. Subsection 93(1) gives the government authority to regulate various matters concerning toxic substances, including:

- (a) the quantity or concentration of the substance that may be released into the environment either alone or in combination with any other substance from any source or type of source;
- (b) the places or areas where the substance may be released;
- (c) the commercial, manufacturing or processing activity in the course of which the substance may be released; [and]
- (d) the manner in which and conditions under which the substance may be released into the environment, either alone or in combination with any other substance[.]

Carbon dioxide (CO₂) is among the toxic substances that are listed in <u>Schedule 1 of *CEPA*</u>—as are several other significant greenhouse gases, such as methane (CH₄), nitrous oxide (N₂O), and a number of fluorinated gases—and so the regulation-making authority bestowed by subsection 93(1) of the Act provides the legal foundation for regulations that aim to reduce carbon dioxide emissions caused by coal-fired electricity generation. Supplementary regulation-making authority is provided by subsection 330(1), which, among other things, gives the Governor in Council power to prescribe minimum, average, or maximum quantities or concentration of substances, and the methods of determining such quantities or concentrations, when exercising its other regulation-making powers under the Act.

The legal foundation for the Canada-Nova Scotia Equivalency Agreement comes from section 10 of *CEPA*. Subsection 10(1) recognizes that the Government of Canada could made an order declaring that regulations established under subsection 93(1) do not apply within another government's jurisdiction (for example, within the jurisdiction of a province, territory, or recognized Indigenous government). Subsection 10(3) identifies specific conditions that must be met before such an order can be made, and it requires the Minister of Environment and Climate Change to agree in writing with the other government in question that that other government's own laws:

• contain provisions that are equivalent to the regulation in question, and

• contain provisions that are similar to provisions in *CEPA* that enable the investigation of alleged environmental offences.

In the context of equivalency agreements pertaining to CO2 emissions caused by coal-fired electricity generation, the federal government has interpreted subsection 10(3) of *CEPA* as allowing an outcomebased approach rather than requiring provincial regulations that do exactly the same thing as the federal regulations in question. In other words, the federal government interprets section 10 of *CEPA* as empowering it to say to a provincial government:

Okay, we agree that you have provincial environmental laws in place that produce the same outcome that our regulations are meant to produce, and we agree that you have adequate laws in place to enforce those environmental laws, so our regulations won't apply in your province as long as you keep things under control.

On May 26, 2014, the Government of Canada and the Government of Nova Scotia entered into the kind of written agreement that subsection 10(3) of *CEPA* contemplates, basing it primarily on the effects of recent amendments that had been made to Nova Scotia's *Greenhouse Gas Emissions Regulations*, which exist under Nova Scotia's *Environment Act*. On November 11, 2014, the federal government made a corresponding order in accordance with subsection 10(1), and both the order and the agreement came into force on July 1, 2015.

That first agreement was the Agreement on the Equivalency of Federal and Nova Scotia Regulations for the Control of Greenhouse Gas Emissions from Electricity Producers in Nova Scotia between the Government of Canada as Represented by the Minister of the Environment ("Canada") and the Government of Nova Scotia as Represented by the Minister of Environment ("Nova Scotia"). For convenience, that agreement will be referred to as the <u>2015-2019 Equivalency Agreement</u> throughout the remainder of this report.

The terms of the 2015-2019 Equivalency Agreement indicated that the Government of Canada was satisfied that the effects of Nova Scotia's *Greenhouse Gas Emissions Regulations*, as amended to include mandatory GHG emissions limits for Nova Scotia's electricity sector from 2021 to 2030, would be equivalent to the effects of the *Coal-fired Electricity Regulations*, as determined by the GHG emission levels, assessed in tonnes of carbon dioxide equivalent (CO₂e), that the federal and provincial regimes would each allow. The Agreement did not include a clear comparison of the CO₂e emissions limits that would have been imposed under the *Coal-fired Electricity Regulations* as compared to the *Greenhouse Gas Emissions Regulations*, but it listed the limits that Nova Scotia had set in the amended *Greenhouse Gas Emissions Regulations* as part of the Agreement and incorporated those limits as conditions of the Agreement.

The 2015-2019 Equivalency Agreement was set to terminate on December 31, 2019, but the parties committed to initiating its renewal if Nova Scotia's legislative regime continued to mandate GHG emission reductions equivalent to those that the *Coal-fired Electricity Regulations* would produce. The current Equivalency Agreement came into force on January 1, 2020.

Unlike the 2015-2019 Equivalency Agreement, the current Equivalency Agreement clearly compares the total amount of CO₂e emissions that Nova Scotia's electricity sector would be allowed to produce before December 31, 2029 if the *Coal-fired Electricity Regulations* applied in the province versus the total amount of CO₂e that the sector could produce under Nova Scotia's own *Greenhouse Gas Emissions Regulations* within the same period. According to current Equivalency Agreement, Nova

Scotia's *Greenhouse Gas Emissions Regulations* will lower GHG emissions even further than the *Coal-fired Electricity Regulations* would, by a difference of 7.9 megatonnes.

The current Equivalency Agreement is set to terminate on December 31, 2024, but its terms indicate that it could be renewed in its current form so long as any renewed agreement is set to terminate by December 31, 2029 at the latest. The agreement also includes a provision which states:

The parties are committed to negotiating a new or amended equivalency agreement for the period 2015-2040 that reflects the transition from coal to non-emitting electricity in Nova Scotia, provided that Nova Scotia has put in place an equivalent regulatory regime which gives rise to equivalent environmental outcomes.

This provision indicates that the federal government is willing to consider and accommodate the continued generation of coal-fired electricity in Nova Scotia beyond December 31, 2029.

3. Provincial Carbon Pricing and the Federal Backstop

In October 2016, the Government of Canada proposed a pan-Canadian benchmark for carbon pricing that identified the pricing options from which provincial and territorial governments could choose (either an explicit price-based system based on a carbon tax or carbon levy, or a cap-and-trade system), along with the expectation that provinces and territories would legislate progressive increases in stringency using at least the minimum standards set by the federal government.¹⁵ At the same time, the Government of Canada expressed its intention to implement a federal backstop, taking the form of an explicit price-based system in place by 2018. The federal government created its backstop by enacting the *Greenhouse Gas Pollution Pricing Act*, which came into force on June 21, 2018. Importantly, the federal backstop takes a two-pronged approach: it includes a "fuel charge" that imposes a general pollution price on fuel, and it includes a separate pollution price for large industrial emitters, which is imposed through a designated Output-Based Pricing System.¹⁶

Before the enactment of the *Greenhouse Gas Pollution Pricing Act*, New Brunswick and Nova Scotia each worked to develop "made at home" carbon pricing systems that would apply within their provinces instead of the federal backstop.

• New Brunswick: The federal government rejected the first provincial carbon pricing system that New Brunswick proposed,¹⁷ and so the *Greenhouse Gas Pollution Pricing Act* applied to New Brunswick when the Act came into force. New Brunswick later proposed a provincial carbon tax that the federal government accepted as meeting the federal benchmark stringency requirements for the "fuel charge" prong of the federal backstop.¹⁸ New Brunswick's fuel charge was implemented through recent amendments to the provincial *Gasoline and Motive Fuel Tax Act*, and it came into effect on April 1, 2020, supplanting that part of the federal regime. New Brunswick has also proposed a provincial carbon-pricing system for large

¹⁵ See Government of Canada, "Pan-Canadian Approach to Pricing Carbon Pollution" (13 October 2016).

¹⁶ See Government of Canada, "<u>Pricing Carbon Pollution from Industry</u>" (28 June 2019).

¹⁷ See Government of Canada, "<u>New Brunswick and Pollution Pricing</u>" (21 February 2019).

¹⁸ See Government of Canada, "<u>New Brunswick's Government to Put a Price on Carbon Pollution from Fuels Next Year</u>" (11 December 2019).

industrial emitters, which is expected to be implemented through regulations created under the provincial <u>*Climate Change Act*</u>. That system is currently under review by the federal government, but it has not yet been accepted,¹⁹ so the Output-Based Pricing System continues to apply to large industrial emitters in the province.

Nova Scotia: Nova Scotia instituted a cap-and-trade system by amending its *Environment Act* and, under the authority of those amendments, creating provincial <u>Cap-and-Trade Program</u> <u>Regulations</u>. The Environment Act amendments were made in October 2017 and came into force in February 2018, and the Cap-and-Trade Program Regulations became effective in November 2018. In February 2018, the provincial government also created <u>Quantification</u>, <u>Reporting and Verification Regulations</u> under the Environment Act to complement the existing Greenhouse Gas Emissions Regulations and specify the formulae to be used when calculating GHG emissions, along with the reporting requirements and Ministerial powers of verification that apply. The federal government accepted that the provincial cap-and-trade program meets the federal benchmark stringency requirements, and the program took effect on January 1, 2019.

It is beyond the scope of this report to provide complete summaries of the carbon pricing regimes that currently apply in New Brunswick and Nova Scotia. Each regime has implications for the provincial electricity sectors at issue in this report, but in terms of the regulatory issues that are the focus of this report, those are primarily cost implications. The federal benchmark stringency requirements and the provincial carbon tax and cap-and-trade program that New Brunswick and Nova Scotia have developed, respectively, to meet them can be expected to inform NB Power's and NSPI's revenue requirements and, therefore, the rates and transmission tariffs that the utilities will propose to their respective regulators now and in the years to come. Likewise, the utilities' legal obligations under the relevant federal and provincial laws will necessarily condition the assessments that the EUB and UARB perform when considering tariffs and rates that are just and reasonable.

4. Federal Regulation of Nuclear Energy Generation

In Canada, nuclear facilities are regulated primarily at the federal level. Canada's <u>Nuclear Safety and</u> <u>Control Act</u> is the key statute in the regulatory regime, and the Canadian Nuclear Safety Commission (the "CNSC" or the "Commission")—which is established and empowered by the Act—is the body with direct regulatory oversight over nuclear facilities throughout the country.

Although nuclear facilities are regulated primarily at the federal level, various provincial statutes and regulations—such as provincial legislation dealing with environmental assessment—may have roles to play as well. Where appropriate, the CNSC will work together with provinces to ensure that their intersecting areas of jurisdiction fit together smoothly.

In recent years, the Government of New Brunswick has demonstrated interest in using SMRs as relatively "clean" sources of electricity. A report by NB Power entitled <u>Powering Growth: Building</u> <u>New Brunswick's Energy Future</u> describes the provincial government's 2018 commitment of \$10 million for an Advanced SMR Nuclear Energy Research Cluster, along with separate commitments of \$5 million each by two private companies—Advanced Reactor Concepts ("ARC") and Moltex Energy—to "explore the development, licensing and construction of Advanced Small Modular Reactors (SMRs) at the Point Lepreau site and to establish research and development teams in New

¹⁹ Ibid.

Brunswick".²⁰ The same report indicates that SMR designs being developed by ARC and Moltex Energy are currently undergoing a Vendor Design Review ("VDR") administered by the CNSC.²¹

The CNSC's VDR process is an optional process that vendors can undertake willingly to assess at an early stage whether proposed nuclear facilities are being designed in accordance with the regulatory requirements that Canada's nuclear safety and control laws impose. This webpage on the CNSC's website describes the process and provides links to documents related to VDRs of SMR designs proposed by ARC and Moltex Energy. According to the website, the Phase 1 review of ARC's design is complete, while the Phase 1 review of Moltex Energy's design is still ongoing. SMRs are categorized as Class IA nuclear facilities under the *Nuclear Safety and Control Act*.²² This categorization triggers corresponding assessment and licencing processes that will apply under various circumstances when actual SMR projects are proposed for construction and operation.

The VDR is a *pre-licensing* process, meaning that it is not part of the licencing process that Class IA nuclear facilities are required to undergo under the *Nuclear Safety and Control Act*, nor is it part of the assessment process that such facilities may be required to undergo under Canada's *Impact Assessment Act* or provincial environmental assessment statutes and regulations. The VDR process can take considerable time: the Phase 1 review of the ARC design occurred over 24 months, and further phases will take additional time if ARC chooses to pursue them.

The <u>Physical Activities Regulations</u> that exist under Canada's *Impact Assessment Act* identify the projects that will require federal impact assessments. Under section 27 of the regulations, "[t]he site preparation for, and the construction, operation and decommissioning of, one or more new nuclear fission or fusion reactors" will require a federal impact assessment if:

- (a) that activity is located within the licensed boundaries of an existing Class IA nuclear facility and the new reactors have a combined thermal capacity of more than 900 MWth; or
- (b) that activity is not located within the licensed boundaries of an existing Class IA nuclear facility and the new reactors have a combined thermal capacity of more than 200 MWth.

The limitations imposed by subsection 27(a) are significant to NB Power's proposed use of SMRs. Based on the contents of NB Power's *Powering Growth* report, cited above, our understanding is that NB Power intends to propose constructing SMRs at the site of the Point Lepreau nuclear generating station. For the purposes of subsection 27(a), the Point Lepreau nuclear generating station is an existing Class IA nuclear facility. This means that one or more SMRs could be proposed for construction and operation within the licensed boundaries of the Point Lepreau site *without triggering a federal impact assessment* if the SMRs' combined thermal capacity is 900 MWth or less.

According to the <u>CNSC's executive summary of its Phase 1 review of the ARC design</u>, the thermal capacity of the SMR that ARC is designing is 286 MWth. Theoretically, three such SMRs could be proposed for construction and operation within the licensed boundaries of the Point Lepreau site without triggering a federal impact assessment. Assuming that Moltex Energy's design is similar to the ARC design, NB Power could explore various combinations of the available technologies without triggering a federal impact assessment.

²⁰ NB Power, *Powering Growth: Building New Brunswick's Energy Future* at page 5.

²¹ *Ibid* at page 19.

²² See Canadian Nuclear Safety Commission, "<u>Small Modular Reactors</u>" (10 March 2020).

Although it seems likely that SMRs could be deployed in New Brunswick without having first undergone federal impact assessments, such undertakings will nevertheless trigger New Brunswick's provincial environmental impact assessment process.²³ Additionally, the CNSC must also conduct an environmental assessment as part of its licensing regime.

It is beyond the scope of this report to provide a comprehensive assessment and comparison of the environmental assessment processes that could apply to the SMRs that may eventually be deployed in New Brunswick. <u>This CNSC webpage</u> provides a general overview of the CNSC's obligations and processes, and considerable information about the Committee's processes is available elsewhere on its website as well.

The following table identifies select milestones and timelines that exist in the statutes and regulations governing federal impact assessments, New Brunswick's environmental impact assessments, and environmental assessments by the CNSC. It is intended for general comparative purposes only and does not address all of the nuances within the three assessment regimes: as such, it should not be relied upon as a complete summary of the processes it describes. Additionally, the timeline projections included within it are rough, and they are based primarily on the time limits imposed on government by the relevant statutes and regulations more so than the pace of such processes as they progress on the ground.

Federal Impact Assessment	New Brunswick Environmental	Canadian Nuclear Safety
	Impact Assessment	Commission Environmental Review
Per the Impact Assessment Act	Per the <i>Environmental Impact</i> <u>Assessment Regulation</u>	Per the <u>Class I Nuclear Facilities</u> <u>Regulations</u>
1. <u>Proponent provides Agency with an</u> <u>initial description of project</u> : the Agency must create a window for public commentary on the description; no timeline specified; at least 30 days would be expected.	 <u>Proponent registers undertaking</u>: the Minister can request more information if necessary; no timeline stipulated. <u>Minister has all necessary</u> <u>information</u>: the Minister has 30 days 	1. <u>Application for a Licence to</u> <u>Prepare Site submitted</u> : Commission has 60 days to determine whether the application has sufficient information for the Commission to begin its review.
2. <u>Agency decides whether impact</u> <u>assessment is required</u> : this decision must be made within 180 days after the project description is posted; this timeline also encompasses other Agency responsibilities, such as	to determine whether the undertaking requires an environmental impact assessment. 3. <u>Minister has decided that an</u> <u>environmental impact assessment is</u> <u>required</u> : the Minister has 60 days to	2. <u>Commission determines</u> <u>information is sufficient for review</u> : Commission has 5 days to notify the applicant and post a notice to this effect on its website.
 giving notice to the proponent and public through a notice of commencement. 3. <u>Agency requires proponent to provide information</u>: if the Agency's 	establish a review committee, consult with the committee, draft guidelines for the assessment, give public notice, and establish a window for public commentary on the guidelines, with	3. <u>Commission conducts review</u> : Commission has 24 months from the day on which notice was posted to complete its review.

Table 1: Basic Comparison of Environmental Assessment Timelines

²³ Under Schedule A of New Brunswick's <u>Environmental Impact Assessment Regulation</u>, "all electric power generating facilities with a production rating of three megawatts or more" trigger the provincial environmental impact assessment process.

notice of commencement requires the	that window being no more than 30	*The 24-month period described
proponent to provide information, that	days long.	above does not include the time
information must be provided within 3		required for another jurisdiction (like
years.	3. Window for public commentary on	the Province of New Brunswick) to
4. 4	the guidelines is closed: the Minister	conduct an environmental impact
4. <u>Agency refers the impact</u>	has 60 days to issue final guidelines	assessment.
assessment to a review panel: review panels are required for nuclear	to the proponent.	
facilities that require federal impact	4. Proponent prepares terms of	
assessments; after publishing the	reference for an environmental impact	
notice of commencement, the Agency	assessment, carries out an	
has 45 days to refer the impact	environmental assessment, and	
assessment to a review panel.	prepares an environmental impact	
Ĩ	assessment report: no timeline	
	stipulated.	
5. Review panel conducts impact	-	
assessment and provides a report: the	5. Minister and Review Committee	
default timeline for review panels	<u>Review Report</u> : if the Minister is	
reviewing projects regulated under the	satisfied there are no deficiencies, the	
Nuclear Safety and Control Act is 300	Minister can accept the report.	
days, but the timeline can be extended		
up to 600 days if the Agency decides	6. <u>Report Accepted</u> : Within 30 days ,	
upfront (before posting the notice of	the Minister must take various steps to	
commencement) that more time is required.	allow for public commentary on the report, including publishing notice of	
required.	the report in <i>The Royal Gazette</i> and	
	holding one or more public meetings	
6. Minister reviews report: depending	after at least 30 days have passed	
on whether the Minister can make a	since notice of the report was	
decision or must refer the matter to	published in <i>The Royal Gazette</i> .	
the Governor in Council, the default		
deadlines for issuing the decision will	7. Public meeting is held: after the	
be 30 days or 90 days .	public meeting is held, or the last of	
	the public meetings is held, if more	
	than one are held, the Minister must	
	allow a further period of 15 days in	
	which public comments can be	
	submitted.	
	8 Minister telkes verievs stors to	
	8. <u>Minister takes various steps to</u> complete process and prepare and	
	submit recommendation to the	
	Lieutenant Governor-in-Council: no	
	timeline stipulated, except that such	
	steps cannot be taken until the	
	necessary windows for public	
	commentary have closed.	
	-	
Approval Could Issue Within:	Approval Could Issue Within:	Approval Could Issue Within:
~20-22 months or fewer, depending	As few as ~8 months, if the Minister	~27 months or fewer, if the applicant
on how swiftly the Agency makes its	determines that an environmental	provides sufficient information at the
initial determination and how quickly	impact assessment is required and all	beginning.
the proponent provides the necessary	necessary steps are taken swiftly.	-
information to the Agency.		Note that this timeline does not
	The length of time required depends	include the time taken for a federal
Because projects regulated under the	largely on the proponent: the longer	impact assessment or provincial
Nuclear Safety and Control Act	the proponent takes to prepare its	environmental impact assessment.

require referral to a review panel, it	environmental impact assessment	
should not take the Agency 180 days	report, the longer the process will	The CNSC is not obliged to use its
to determine whether to refer to a	take.	full amount of potential time to assess
review panel. A quick decision in that		a licence application. Although the
regard and quick preparation of a		Commission's timeline excludes the
notice of commencement will shorten		time required for a provincial
the process.		environmental impact assessment, this
		does not mean that the time required
The process will take longer if the		for a provincial environmental impact
proponent provides a project		assessment would necessarily extend
description in the early stages of		the application process past the ~ 27
planning and requires considerable		months that the CNSC has to make its
time to provide all necessary		own decision.
information to the Agency.		

As this table indicates, provincial environmental impact assessment and CNSC licensing processes for proposed SMRs could see projects approved within roughly two years or less, but the processes will not necessarily take that long. An applicant that has been working closely with the CNSC through the VDR process will have a significant amount of information ready to hand when it comes time to engage in environmental impact assessment and licencing processes, and those processes may move more quickly as a result.

It is also important to note that securing an environmental impact assessment approval and a CNSC Licence to Prepare Site will not be the end of the licencing process: other CNSC licences will be required in order to construct and operate proposed SMRs, and other provincial authorizations and approvals could be required as well.

Part B: New Brunswick

In New Brunswick, the Minister with the primary responsibility to supervise electricity issues within the province is the Minister of Natural Resources and Energy Development. New Brunswick's main power player is NB Power: a Crown corporation governed primarily by New Brunswick's *Electricity Act* and the Act's corresponding regulations. The *Electricity Act* recognizes three municipal distribution utilities (the Power Commission of the City of Saint John, the City of Edmunston, and the Perth-Andover Electric Light Commission); their powers, however, are limited in comparison to those of NB Power, and the New Brunswick regime seems designed on the whole to preserve NB Power's monopoly on electricity generation, transmission, and distribution within the province.

1. Primary Provincial Statutes and Regulations

This section organizes the primary statutes and regulations shaping New Brunswick's legislated electricity regime into thematic clusters so that relationships between the individual pieces of legislation are clear.

(a) Legislation Controlling GHG Emissions and Enabling Provincial Carbon Pricing

Among other things, New Brunswick's <u>Climate Change Act</u> identifies provincial GHG emissions reduction targets, requires the Government of New Brunswick to make and maintain a provincial Climate Change Action Plan, establishes a provincial Climate Change Fund, and, thanks to <u>recent</u> <u>amendments made in March 2020</u>, provides a legal foundation for the carbon-pricing system that the Government of New Brunswick is proposing to impose on large industrial emitters. It is our understanding that regulations created under the <u>Climate Change Act</u> will implement a provincial carbon-pricing regime for large industrial emitters once the provincial government has confirmed that its proposed regime will meet the federal benchmark stringency requirement.

New Brunswick's <u>Gasoline and Motive Fuel Tax Act</u> now houses the province's "made-at-home" fuel charge, which came into effect on April 1, 2020. The fuel charge is set out primarily in subsections 6.3(1)-6.3(13), 7.01(1)-7.01(4), and 7.2 of the Act, which speak directly to the imposition of a new provincial tax on carbon-emitting products. The <u>General Regulation</u> under the Act sets out additional requirements and regime details.

(b) Legislation Structuring NB Power and Defining the Primary Powers and Duties of New Brunswick's Electric Utilities

New Brunswick's <u>Electricity Act</u> and its corresponding <u>General Regulation</u>, <u>Electricity from</u> <u>Renewable Resources Regulation</u>, <u>Reliability Standards Regulation</u>, and <u>Transitional Transmission</u> <u>Tariff Regulation</u> are the primary statutes and regulations shaping New Brunswick's legislated electricity regime.

As discussed in more detail below, the *Electricity Act* is the primary source of NB Power's duties and powers, along with the corresponding powers and duties of the EUB. Among the regulations that exist under the Act, the *Electricity from Renewable Resources Regulation* is especially significant, as it contains the provincial renewable electricity target that is currently in effect and also provides the regulatory foundation for the Locally Owned Renewable Energy Projects that Are Small-Scale ("LORESS") Program and the Large Industrial Renewable Energy Purchase Program ("LIREPP").

Notably, before 2013, responsibility for energy efficiency, energy conservation, and DSM programs and initiatives in New Brunswick was held by the Energy Efficiency and Conservation Agency of New Brunswick (commonly known as Efficiency New Brunswick), which had been empowered under the <u>Energy Efficiency and Conservation Agency of New Brunswick Act</u>. In 2015, the <u>Energy Efficiency and Conservation Agency of New Brunswick Act</u> was repealed and Efficiency New Brunswick was dissolved through <u>An Act to Dissolve the Energy Efficiency and Conservation Agency of New Brunswick</u>, and Efficiency New Brunswick's responsibilities were assigned to NB Power through corresponding amendments to the <u>Electricity Act</u>. At the same time, a number of new responsibilities associated with the development and delivery of energy efficiency, energy conservation, and DSM programs and initiatives were given to NB Power. Some implications of those changes are discussed in more detail in the special issue discussion below.

(c) Legislation Structuring and Defining the EUB's Role as the Electricity Regulator

The <u>Energy and Utilities Board Act</u> and the <u>General Regulation</u> that exists under it are responsible for creating and empowering the EUB, identifying aspects of its regulatory role and authority, and setting rules for procedures before the Board. These pieces of legislation deal with a number of practical matters concerning the Board's operations, and most of the work of defining the EUB's electricity mandate is left to the *Electricity Act* and its corresponding regulations. Significant mandate provisions that the *Energy and Utilities Board Act* does include—such as language expressing the Board's duty to regulate in the public interest—are replicated substantially in the *Electricity Act*.

(d) Legislation Creating a Public Intervener for New Brunswick's Energy Sector

Unlike Nova Scotia, New Brunswick has created a Public Intervener for the energy sector. The statute creating the role and empowering the person who fills it is <u>An Act Respecting a Public Intervener for</u> <u>the Energy Sector</u>. Among other things, the Act requires the EUB to notify the Public Intervenor of all relevant hearings before the Board, and it makes the Public Intervenor an automatic party to hearings before the Board that are dealing with matters within the Public Intervenor's jurisdiction.

Notably, subsections 6(2), 6(3), and 6(5) of *An Act Respecting a Public Intervenor for the Energy Sector* require the Public Intervener to make representations that it "considers to be in the public interest", and subsection 6(5) states:

During a proceeding of the Board, the Public Intervener shall advocate in the public interest and does not represent the interests of nor advocate on behalf of a party to the proceeding, a customer, a class of customers, a government department or agency or other interested group.

Under these provisions, the Public Intervener cannot represent the special interests of individual persons, organizations, customer classes, or groups: instead, the Public Intervener is required to advocate generally "in the public interest".

2. Sources of Renewable and "Clean" Electricity Recognized by the Province

Section 2 of New Brunswick's *Electricity from Renewable Resources Regulation* defines "electricity from renewable resources" as meaning: "electricity that is generated inside the Province in an innovative manner and provides a net environmental benefit to the Province", "electricity generated inside or outside the Province from a source", and "electricity that is obtained under the Large

Industrial Renewable Energy Purchase Program". Although the phrases "innovative manner" and "net environmental benefit" are fairly vague and may give rise to competing interpretations, the term "source" is given further definition within section 2 and is defined as including: "solar energy", "wind energy", "hydroelectric energy", "ocean-powered energy", "biogas energy", "biomass energy", and "sanitary landfill gas".

Notably, "nuclear generation" is not included within the definition of "source"; however, it is conceivable that industry advocates might wish to characterize electricity generated by SMRs as "electricity that is generated inside the Province in an innovative manner and provides a net environmental benefit to the Province" in order to bring it within the regulatory definition of "electricity from renewable resources". Since the phrases "innovative manner" and "net environmental benefit" are not defined by the regulation, there may be considerable room for Ministerial discretion in that regard.

3. Renewable Electricity Targets

(a) Setting the Targets

Subsection 136(1) of the *Electricity Act* states that NB Power "shall, in accordance with the regulations, ensure that a portion of the electricity that it obtains is from renewable resources", and subsection 3(1) of the *Electricity from Renewable Resources Regulation* states:

On December 31, 2020, and for each subsequent fiscal year, the Corporation shall ensure that 40% of the total in-province electricity sales in kilowatt-hours is electricity from renewable resources.

The *Electricity from Renewable Resources Regulation* also states, in subsection 3(2), that since August 12, 2014, NB Power has been required to "endeavour to obtain more electricity from renewable resources" with an eye to "gradually fulfilling" the 40% requirement set out in subsection 3(1). Additionally, subsection 3(3) of the regulation has required NB Power to ensure that since August 12, 2014 it has maintained the same renewable electricity percentage of the total in-province electricity sales in kilowatt-hours that it achieved in the fiscal year 2012-2013.

The *Electricity Act* and its corresponding *Electricity from Renewable Resources Regulation* do not impose a renewable electricity requirement on New Brunswick's three municipal distribution utilities, nor does the *Electricity Act* empower the provincial government to make regulations requiring municipal distribution utilities to obtain electricity from renewable resources.

(b) Enforcing the Targets

The *Electricity from Renewable Resources Regulation* does not include tailored enforcement provisions that apply specifically to New Brunswick's renewable electricity regime.

Under subsection 130(a) of the *Electricity Act*, the EUB is empowered to "order and require any person to do, without delay or within or at any specified time and in any manner it determines, any act, matter or thing that a person is or may be required to do under this Act or the regulations or a rule or order or direction made by the Board". Under subsection 140(2) of the *Electricity Act*, a person's failure to

comply with an order or decision of the Board made under subsection 130(a) is an offence that is punishable as a category F offence under the *Provincial Offences Procedure Act*.

Together, the provisions cited above mean that the renewable electricity targets set out in the *Electricity from Renewable Resources Regulation* are enforceable against NB Power. The EUB has the authority to order NB Power to comply with the regulation and meet the target, and a failure to comply with such an order by the EUB would be a category F offence under the *Provincial Offences Procedure Act*.

Under subsection 56(6) of the *Provincial Offences Procedure Act*, a first offence of this kind could attract a fine of in the range of \$240 to \$10,200, and under section 57 and subsections 63(2) and 70(1), a subsequent offence of the same kind could, under certain circumstances, attract a fine of up to \$24,000.

4. Responsibilities for Energy Efficiency, Energy Conservation, and Demand-side Management

(a) Who Bears the Responsibilities, and How Are They Defined?

Amendments to the *Electricity Act* in 2015 assigned responsibilities for energy efficiency, energy conservation, and DSM programs and initiatives to NB Power. Before the amendments were made, responsibility for such initiatives was held by Efficiency New Brunswick.

The relevant sections of the *Electricity Act* are sections 117.1 and 117.2. Section 117.1 gives NB Power responsibility for:

- (a) promoting the efficient use of energy and the conservation of energy in the Province;
- (b) developing and delivering programs and initiatives in relation to energy efficiency, energy conservation, and demand-side management;
- (c) developing and delivering programs and initiatives in relation to energy efficiency, energy conservation and demand-side management for low-income homeowners on behalf of the Province, provided that these programs and initiatives are paid for by the Province;
- (d) developing and delivering programs and initiatives in relation to energy efficiency, energy conservation and demand side management on behalf of a third party for its customers, provided that these programs and initiatives are paid for by the third party;
- (e) promoting the development of an energy efficiency services industry;
- (f) acting as the primary organization for the promotion of energy efficiency, energy conservation and demand-side management in the Province;
- (g) raising awareness among energy consumers of energy use; and
- (h) implementing demand-side management and energy efficiency plans.

Section 117.2 gives NB Power the legal authority required to carry out its responsibilities under section 117.1.

Importantly, NB Power's responsibilities under section 117.1 of the *Electricity Act* inform the EUB's responsibility to ensure that just and reasonable rates are charged for NB Power's services. Under section 103(7) of Act, when the EUB is determining whether to approve rates that NB Power has proposed or to fix alternative rates, the Board must consider a number of factors, including "any requirements imposed by law on the Corporation that may be relevant to the application, including, without limitation, requirements regarding demand-side management and energy efficiency plans and renewable energy requirements".²⁴

Notably, section 137 of the *Electricity Act* states that distribution electric utilities "shall implement plans to meet demand-side management and energy efficiency requirements, if any, set out in the regulations". Because the Act's definition of "distribution electric utilities" includes municipal distribution utilities, this means that regulations under the Act have a legal foundation to impose DSM and energy efficiency requirements on the province's three municipal distribution utilities as well as on NB Power.

(b) Is Cost-Effectiveness Required?

In Nova Scotia, the *Public Utilities Act* requires NSPI to "undertake <u>cost-effective</u> electricity efficiency and conservation activities that are reasonably available in an effort to reduce costs for its customers" (emphasis added). Section 117.1 of New Brunswick's *Electricity Act*, which assigns responsibilities for developing and delivering energy efficiency, energy conservation, and DSM programs and initiatives to NB Power, does not state specifically that such programs and initiatives must be cost-effective.

Despite the absence of an express statutory requirement to develop and deliver cost-effective programs and initiatives under section 117.1, the contents of the *Electricity Act* as a whole suggest that cost-effective programming is required. Subsection 100(1)(e) of the Act, which addresses NB Power's responsibilities with regard to its integrated resource planning, states that an integrated resource plan ("IRP") must include "the cost implications of the demand-side management and energy efficiency plans and supply-side options chosen for implementation by the Corporation as projected for the initial 10-year period covered by the integrated resource plan", and subsection 100(2) of the Act requires NB Power to develop IRPs "in accordance with the principles of least-cost service, economic and environmental sustainability and risk management". In other words, NB Power's IRPs are statutorily required to accord with principles of least-cost service, and the IRPs must account for the cost implications of DSM, energy efficiency plans, and supply-side options. This indicates that NB Power's ability to develop and deliver energy efficiency, energy conservation, and DSM programs and initiatives must be exercised in accordance with the Corporation's responsibility to ensure that its cost of service is no higher than necessary.

NB Power has also received directions from the Government of New Brunswick to "[strengthen] existing, and [develop] new <u>cost-effective</u> energy efficiency programs that result in direct savings to customers and NB power, and support business development through contractor and consultant networks" (emphasis added).²⁵ This direction appeared in the 2018-2019 mandate letter that the

²⁴ See subsection 103(7)(c).

²⁵ Honourable Rick Doucette, Minister of Energy and Resource Development, "2018/19 Mandate Letter between the Minister of Energy and Resource Development and the New Brunswick Power Corporation (NB Power)" (23 July 2018) at page 4 ["2018-2019 Mandate Letter"].

Honourable Rick Doucette. Minister of Energy and Resource Development, gave to NB Power, and it evinces a clear expectation that NB Power's energy efficiency programming will be cost-effective.

Notably, the 2018-2019 mandate letter also expresses the Minister's view that the letter could be considered a directive for the purposes of section 69 of the *Electricity Act*, which states that "[t]he Executive Council may at any time issue directives in writing to the Corporation that must be taken into consideration by the board of directors of the Corporation".²⁶ Subsection 103(7)(e) of the *Electricity Act* requires the EUB to take into account any directive issued under section 69 when approving or fixing just and reasonable rates. This means that if the Minister's mandate letter is understood to be a directive for the purposes of section 69, the EUB must consider its directions concerning cost-effective energy efficiency programming when approving or fixing rates.

It is not clear whether the EUB would accept that the Minister's mandate letter is a directive for the purposes of section 69 of the *Electricity Act*. The transcripts of the hearing for NB Power's 2018-2019 General Rate Application—<u>archived as Matter 0375 and accessible through the EUB's documents</u> <u>database</u>—indicate that the legal status of this mandate letter was in question during that hearing, but the issue was not addressed directly in the EUB's written decision on the matter.

At this time, it would be prudent not to assume that the EUB would recognize the mandate letter as a directive by the Executive Council in accordance with section 69 of the *Electricity Act*. However, even if the letter cannot function as a directive for the purposes of section 69, it may nevertheless serve as useful evidence of government expectations and policy.

(c) Cost-Effectiveness Testing

The EUB currently uses the Program Administrator Cost Test (the "PACT") to assess the costeffectiveness of DSM programming.²⁷ By contrast, Nova Scotia's UARB currently uses the Total Resource Cost Test.²⁸

5. Programs Requiring or Enabling the Purchase of Locally Generated Renewable Electricity

(a) The Locally Owned Renewable Energy Projects that Are Small-Scale Program

Sections 5-22 of New Brunswick's *Electricity from Renewable Resources Regulation* create the LORESS Program. Under the program, NB Power is required to "endeavour" to obtain certain amounts of electricity generated from renewable resources supplied by "Aboriginal businesses" and "local entities", both of which are terms defined by section 5 of the regulation, and it is also empowered to procure electricity from renewable resources through distributed generation.

The LORESS Program appears to have been designed to promote community investment in small-scale renewable electricity generation by establishing clear procurement set-asides for Aboriginal business and local entities; however, the program appears to give NB Power considerable latitude in determining whether and how to enter into procurement agreements with interested Aboriginal businesses and local

²⁶ 2018-2019 Mandate Letter, *supra* note 25 at page 3.

²⁷ See EUB Matter 0375 Decision, *supra* note 3 at paragraphs 107-117.

²⁸ See *Efficiencyone (Re) 2020, supra* note 4 at paragraph 43.

entities.²⁹ Compared to the detailed power-purchase agreement regimes that the Government of Nova Scotia established for similar programs under Nova Scotia's *Electricity Act* and *Renewable Electricity Regulations*, the legislative structure of the LORESS Program offers less certainty about how contractual relations are meant to be carried out.

Because the wording of New Brunswick's *Electricity from Renewable Resources Regulation* only requires NB Power to "endeavour" to obtain the target amounts of renewable electricity supplied by Aboriginal business and local entities, the LORESS Program may lack the necessary legal force to incent investment. For comparison, consider the language structuring the LIREPP, which also exists under the *Electricity from Renewable Resources Regulation*. Subsection 24(1) of the regulation states:

Subject to subsection (2) and section 28, the Corporation shall, in accordance with the Program, obtain enough eligible electricity from an eligible large industrial enterprise that the cumulative cost of firm electricity for all of the eligible facilities owned and operated by the eligible large industrial enterprise is reduced by the target reduction per cent.

Here, the use of the word "shall" means that NB Power is legally required to *actually obtain* the set amount of eligible electricity from eligible large industrial enterprises. That legal obligation stands in stark contrast to the legal obligation that the LORESS Program imposes, which is an obligation to "endeavour" (i.e., to *try*).

Under subsection 3(7)(a) of the *Electricity from Renewable Resources Regulation*, electricity obtained through the LORESS Program counts towards the 40% renewable electricity target that is set out in subsection 3(1).

(b) The Large Industrial Renewable Energy Purchase Program

Sections 23-28 of the *Electricity from Renewable Resources Regulation* create the LIREPP. As noted above, this program requires NB Power to "obtain enough eligible electricity from an eligible large industrial enterprise that the cumulative cost of firm electricity for all of the eligible facilities owned and operated by the eligible large industrial enterprise is reduced by the target reduction per cent".

Section 27 of the regulation describes how the target reduction percent will be calculated in each fiscal year, and it also gives the Minister of Natural Resources and Energy Development the responsibility to make that calculation.

Under section 23 of the regulation, "eligible electricity" is defined as meaning "electricity generated in the Province at any of the following facilities owned and operated by an eligible large industrial enterprise":

- (a) an eligible facility at which electricity is generated through the combustion of woody biomass or its by-products from the chemical manufacture of pulp, including black and red liquors, for the purposes of cogeneration or producing combined heat and power;
- (b) a facility at which electricity is generated through the combustion of woody biomass or its by-products from the chemical manufacture of pulp, including black and red liquors, for the purposes of cogeneration or producing combined heat and power; or

²⁹ See sections 11-12 and 18-19 in particular.

(c) a facility at which electricity is generated from a source.

Under the same section of the regulation, the term "eligible industrial enterprise" is defined as meaning "an organization, or a group of organizations, that is directly or indirectly owned or controlled by the same person and that":

- (a) owns and operates an eligible facility, and
- (b) owns and operates a facility that generates eligible electricity.

Also under the same section of the regulation, "eligible facility" is defined as meaning "a facility that meets the following criteria":

- (a) the facility has an electrical energy requirement of not less than 50 GWh per year;
- (b) the facility obtains all or a portion of its electricity on a firm basis from the Corporation; and
- (c) at least 50% of the primary products produced by the facility are exported to another province or territory of Canada or elsewhere.

Based on these definitions, it appears that the LIREPP was designed primarily to structure power purchase agreements between NB Power and pulp mills in the province.

As noted above, electricity obtained through the LIREPP program is included within the *Electricity from Renewable Resources Regulation*'s definition of "electricity from renewable sources". Additionally, subsection 3(7)(b) of the regulation states that electricity obtained through the LIREPP program shall count towards the 40% renewable electricity target set out in subsection 3(1).

6. Reliability and Performance Standards

Section 71 of the *Electricity Act* addresses the reliability of NB Power's integrated electricity system. Among other things, it requires NB Power to "maintain the adequacy and reliability of the integrated electricity system", and it enables NB Power to "participate with any standards body in the development of standards and criteria relating to the reliability of transmission systems".³⁰

The EUB has the ultimate responsibility for approving the reliability standards that apply to NB Power, and sections 119(1) and 119(2) of the Act set out some of the Board's powers and duties in that regard. More specific requirements are set out in the *Reliability Standards Regulation* under the *Electricity Act*. Under the *Reliability Standards Regulation*, NB Power and the EUB are expected to use the standards approved by the FERC, although those standards may be modified as necessary.

Whereas the Government of Nova Scotia has imposed performance standards on NSPI that exist over and above the reliability standards with which NSPI must comply, the Government of New Brunswick has not imposed such performance standards on NB Power. One significant difference arising from the different provincial approaches is that NSPI is obliged to meet a performance standard that deals

³⁰ See subsections 71(b) and 71(e).

specifically with its response to adverse weather conditions, whereas no analogous standard appears to exist for NB Power, whether embedded in FERC reliability standards or located elsewhere.

7. The Powers and Duties of the Energy and Utilities Board

Like all administrative bodies created by statute, the EUB's powers and duties are shaped by the statutes and regulations that establish the Board and define its responsibilities. The EUB is limited by the laws that create and constrain its authority: it cannot do anything that the Government of New Brunswick has not empowered it to do.

The powers and duties of the EUB with respect to its electricity mandate are shaped primarily by the *Electricity Act*; however, New Brunswick's *Energy and Utilities Board Act* also plays an important role by defining the structure of the Board, the terms and employment conditions of its members and employees, procedural matters relating to Board hearings, and various other practical matters relating to the Board's operations as an administrative body. Notably, although the *Energy and Utilities Board Act* leaves much of the work of defining the EUB's responsibilities to other statutes and regulations, section 54 identifies the Board's regulatory role as the supervisor of all public utilities within the province and sets out some of its specific powers in that regard. Additionally, section 66 states that "[a]ny order of the Board made under this Part is subject to such terms and conditions as the Board considers necessary in the public interest". These provisions are substantially replicated in sections 129, 130, and 131 of the *Electricity Act*, and, in particular, the public-interest mandate inscribed in section 66 of the *Energy and Utilities Board Act* is echoed and expanded in section 131 of the *Electricity Act*, which states:

Any order or decision of the Board made under this Act or the regulations is subject to any terms or conditions that the Board considers necessary in the public interest.

Significantly, the EUB has interpreted section 131 of the *Electricity Act* as creating an overarching mandate to ensure that all of its orders and decisions under the *Electricity Act* and its corresponding regulations are made with the public interest in mind.³¹

Many of the EUB's powers and duties as the provincial electricity regulator are addressed in Part 8 of the *Electricity Act*, which deals specifically with the roles and responsibilities of the Board. However, the Board's fundamental role as a regulatory supervisor means that its responsibilities are informed by the legal obligations belonging to NB Power and other legal persons under the Board's supervision. Except in cases where relevant statutes and regulations have assigned regulatory responsibilities to the Minister of Natural Resources and Energy Development, legal obligations belonging to NB Power and other legal persons under the Board's supervision should be understood as triggering corresponding powers or obligations for the EUB. Notably, however, whereas Nova Scotia's *Public Utilities Act* states explicitly that Nova Scotia's UARB has a legal duty to enforce the provisions of the *Public Utilities Act* nor its *Energy and Utilities Board Act* contain an equivalent provision that clearly requires the EUB to enforce all laws that are applicable to NB Power and other legal persons under the Board's supervision. The New Brunswick statutes *empower*, but do not explicitly *require*, the EUB to ensure that NB Power and other legal persons under its supervision are complying with relevant laws.

³¹ See EUB Matter 0375 Decision, *supra* note 3 at paragraph 75.

³² See section 47.

(a) The EUB's Mandates to Ensure the Reasonable Adequacy and Safety of Services and Facilities, Just and Reasonable Rates and Tariffs, Non-Discriminatory Access to Transmission Services, and Prudent Capital Spending

Four significant provisions within the *Energy and Utilities Board Act* and *Electricity Act* assign powers and duties to NB Power and articulate government policies that play particularly important roles in conditioning the EUB's electricity mandate. Section 70 of the *Energy and Utilities Board Act* requires every public utility within the province to "furnish reasonably adequate and safe services and facilities" (emphasis added). Subsection 68(a)(ii) of the *Electricity Act* states that under the electricity policy chosen by the Government of New Brunswick, the rates that NB Power charges for electricity sales within the province "should provide sufficient revenue to the Corporation to permit it to earn a just and reasonable return, in the context of the Corporation's objective to earn sufficient income to achieve a capital structure of at least 20% equity" (emphasis added). Section 85 of the *Electricity Act* states that each transmitter "shall provide users of the integrated electricity system with open and <u>non-discriminatory</u> access to its transmission system in accordance with the electricity business rules and the approved transmission tariff" (emphasis added). Lastly, subsection 107(9) of the *Electricity Act* states that when NB Power applies for Board approval of a capital project in accordance with its obligations under section 107 of the Act, the Board must approve that capital project if the Board is satisfied as to its <u>prudence</u>.

Respectively, these four provisions say that the Board must always remain alert to utilities' duties to furnish reasonably adequate and safe services and facilities. When approving or fixing the rates that NB Power will charge for its services, the Board must determine what will be just and reasonable. When approving or fixing transmission tariffs, the Board must ensure that users of the integrated electricity system—meaning the transmission systems within New Brunswick and the structures, equipment, and other things connecting them with generation facilities and distribution systems within the province as well as transmission systems outside the province—can access transmission systems without discrimination.³³ (Notably, subsections 111(2), 113(12), 113(3), 113(14), and 116(4) of the Act also require that an approved or fixed transmission tariff be just and reasonable). And, finally, before approving a capital project that NB Power has proposed, the Board must be satisfied that the project is prudent. Importantly, because the *Electricity Act* also gives the EUB an overarching mandate to protect the public interest, the Board's mandates to ensure the reasonable adequacy and safety of services and facilities, just and reasonable rates and tariffs, non-discriminatory access to transmission services, and prudent capital spending are also conditioned by that overarching role.

(b) Digging More Deeply into Justness and Reasonableness

The EUB's assessment of what rates would be "just and reasonable" is conditioned by sections within the *Electricity Act* that identify specific requirements for that analysis. For example, subsection 103(7) requires the Board to take the following into consideration when approving or fixing just and reasonable rates:

- (a) the policy set out in section 68 [which demonstrates the provincial government's desire that NB Power achieve a capital structure of at least 20% equity],
- (b) the most recent integrated resource plan approved or deemed to be approved by the Executive Council under section 100,

³³ See section 1 of the NB *Electricity Act*, where "integrated electricity system" is defined.

- (c) the most recent strategic, financial and capital investment plan filed with the Board under section 101,
- (d) any requirements imposed by law on the Corporation that may be relevant to the application, including, without limitation, requirements regarding demand-side management and energy efficiency plans and renewable energy requirements,
- (e) any directive issued by the Executive Council under section 69 that may be relevant to the application, and
- (f) any policy established by a regulation made under paragraph 142(1)(f) that may be relevant to the application.

Additionally, subsection 103(8) states that when the Board is approving or fixing just and reasonable rates, it may also consider:

- (a) accounting and financial policies of the Corporation,
- (b) matters of cost allocation and rate design,
- (c) customer service related charges,
- (d) the Corporation's demand-side management and energy efficiency plans, and
- (e) any other factors that the Board considers relevant.

Notably, the Board's responsibility to ensure that approved or fixed transmission tariffs are also just and reasonable is not expressly conditioned by the same requirements that are set out in subsections 103(7) and 103(8), which apply specifically to the Board's roles and responsibilities with respect to rates.

The factors identified in subsections 103(7) and 103(8) of the *Electricity Act* do not explicitly prioritize cost considerations or ratepayers' financial interests in relation to other listed considerations, and subsection 103(7)(d) makes it clear that neither NB Power nor the EUB can ignore NB Power's legal obligations with respect to DSM, energy efficiency, and renewable energy requirements when proposing or fixing rates. That said, the significance of cost considerations is apparent from the fact that subsection 103(7) explicitly incorporates the provincial government's desire that NB Power achieve a capital structure of at least 20% equity and requires the EUB to take that policy statement into account.

In practical terms, subsection 103(7) of the *Electricity Act* requires the EUB to balance NB Power's fiscal health (or lack thereof) against the corporation's legal obligations with respect to DSM, energy efficiency, and renewable energy requirements. This reality has implications for NB Power's energy efficiency, energy conservation, and DSM responsibilities under section 117.1 of the Act, as the EUB will likely be reluctant to approve ambitious energy efficiency, energy conservation, or DSM programs or initiatives that pose unreasonable risks to NB Power's fiscal health. Not least for this reason, the EUB conducts a cost-benefit analysis when considering NB Power's proposals under section 117.1—a topic to which we return in the special issue discussion below.

(c) Digging More Deeply into Prudence

Notably, the EUB has considered the meaning of the word "prudence" as it appears in subsection 107(9) of the *Electricity Act*.

In its written decision on NB Power's 2018-2019 General Rate Application—<u>archived as Matter 0375</u> and accessible through the EUB's documents database—the EUB considered the fact that the *Electricity Act* does not define the meaning of the word "prudence" for the purposes of subsection 107(9). In the Board's view, the Board's core public-interest mandate is an "overarching" factor in interpreting the word, and, with that in mind, the Board interpreted "prudence" like so:

A prudent project must consider both short-term and long-term outcomes. The demonstrated benefits to ratepayers must outweigh the expected costs that ratepayers will be asked to bear. These can be both quantifiable and non-quantifiable.

In this particular decision, the EUB was not satisfied of the prudence of the capital project that NB Power had proposed, and so it held that the project was not in the public interest.

(d) Participating in Proceedings before the EUB

The EUB's <u>Rules of Procedure</u> permit three forms of participation in hearings before the EUB: formal intervention, participation by comment, and participation in public fora. The Board has published a <u>"Helpful Guide" to Participating in Board Proceedings</u>, and so we do not canvas those processes here.

8. Special Issue: Affordability and Low-Income Efficiency Programming in New Brunswick The affordability of electricity is connected to the efficiency with which electricity is used. For electricity consumers, a significant benefit of energy efficiency, energy conservation, and DSM measures is that such measures can lower electricity bills and, in doing so, make electricity usage more affordable. For low-income electricity consumers, such measures can be particularly helpful; however, if the measures themselves are not affordable, low-income consumers may have few opportunities to reap their benefits.

Recently in New Brunswick, concerns and contested interpretations have arisen regarding NB Power's ability to deliver energy efficiency, energy conservation, and DSM programs that are targeted to low-income homeowners. This section explores that issue by assessing the problem and identifying options for moving forward.

(a) Assessing the Problem

In 2015, Efficiency New Brunswick was dissolved by statute and corresponding amendments to the *Electricity Act* assigned its energy efficiency, energy conservation, and DSM responsibilities to NB Power. The amendments also gave NB Power some energy efficiency, energy conservation, and DSM responsibilities that had not previously been held by Efficiency New Brunswick.

Those amendments now appear as sections 117.1 and 117.2 of the *Electricity Act*. Overall, the sections give NB Power responsibility for various activities relating to energy efficiency, energy conservation, and DSM, and they empower the corporation to do anything that it considers necessary or convenient

for, or incidental or conducive to, the carrying out of that responsibility. Subsection 117.1(c) deals specifically with programs and initiatives designed for low-income homeowners, and it states:

117.1 The Corporation is responsible for the following:

[...]

(c) developing and delivering programs and initiatives in relation to energy efficiency, energy conservation and demand-side management for low-income homeowners on behalf of the Province, provided that these programs and initiatives are paid for by the Province[.]

This responsibility was not imported from the *Energy Efficiency and Conservation Agency of New Brunswick Act*, but was an entirely new responsibility assigned to NB Power when the amendments were made. Under section 4 of the *Energy Efficiency and Conservation Agency of New Brunswick Act* (now repealed), Efficiency New Brunswick's responsibilities were:

(a) to promote the efficient use of energy and the conservation of energy in all sectors of the Province,

(b) to develop and deliver programs and initiatives in relation to energy efficiency and conservation,

(c) to promote the development of an energy efficiency services industry,

(d) to act as the primary organization for the promotion of energy efficiency and conservation in the Province,

(e) to raise awareness among energy consumers of energy use and the associated economic and environmental consequences, and

(f) to carry out any other activities relating to energy efficiency and conservation that the Lieutenant-Governor in Council directs.

The responsibility to develop and deliver energy efficiency, energy conservation, and DSM programs and initiatives targeting low-income homeowners appeared for the first time in *An Act to Dissolve the Energy Efficiency and Conservation Agency of New Brunswick*, which not only dissolved Efficiency New Brunswick but also amended the *Electricity Act* so that it would include sections 117.1 and 117.2 as they appear today.

The legal and practical significance of subsection 117.1(c) of the *Electricity Act* were at issue in the <u>NB</u> <u>Power 2018-2019 General Rate Application hearing ("EUB Matter 0375")</u>. The hearing concerned a rate increase application and capital project approval application by NB Power. Among the revenue requirements that NB Power identified in its application for a rate increase was a budget of \$2 million that NB Power intended to use to augment a Low-Income Energy Savings program that was already funded by New Brunswick's Department of Social Development.

As the transcripts of the hearing record, the Vice-Chairman of the Board queried whether section 117.1(c) of the *Electricity Act* prohibited NB Power from using ratepayer funding to augment the Low-

Income Energy Savings Program as it had proposed to do.³⁴ Because the provision requires NB Power to develop and deliver "programs and initiatives in relation to energy efficiency, energy conservation and demand-side management for low-income homeowners on behalf of the Province, <u>provided that these programs and initiatives are paid for by the Province</u>" (emphasis added), the Vice-Chairman's concern was that the 2015 amendments to the *Electricity Act* were not intended to require or allow NB Power to use ratepayer funds to develop and deliver low-income renewable electricity programs and initiatives, but were instead designed exclusively to permit NB Power to develop and deliver such programs through designated provincial funding.

The Board's interpretation of subsection 117.1(c) appears at paragraph 130 of its written decision on the matter, which states:

Subsection 117.1(c) of the Act includes the phrase: "...provided that these programs and initiatives are paid for by the Province." The Board concludes that this requires NB Power to develop and deliver such programs on behalf of the Province, but subject to the proviso that the Province funds such programs. <u>This precludes NB Power from funding low-income programs</u>. (emphasis added)

Two aspects of the EUB's decision in EUB Matter 0375 are particularly noteworthy. First, the revenue requirement that NB Power had proposed in this case aimed specifically, and quite clearly, to augment funding for a provincial program that was already in place. In that sense, the initiative that NB Power proposed to carry out could reasonably be interpreted as an initiative that would be delivered "on behalf of the Province". In my opinion, since subsection 117.1(c) of the *Electricity Act* states that energy efficiency, energy conservation, and DSM activities developed and delivered for low-income homeowners on the province's behalf should be paid for by the province, it was reasonably open to the Board to conclude that the revenue requirement NB Power had proposed in this case—\$2 million to augment a program already being funded by the Department of Social Development—was not in accordance with the *Electricity Act*.

Significantly, however, the EUB's decision did more than simply deny the revenue requirement that NB Power had proposed. As cited above, the Board stated that section 117.1(c) of the *Electricity Act* "precludes NB Power from funding low-income programs". In my opinion, this pronouncement goes further than what was needed to decide the issue at hand, and it is not necessarily supported by other provisions of the *Electricity Act* or, indeed, by evaluative methods that the Board itself has chosen to assess the viability of proposed DSM programming.

Energy Smart NB is the platform through which NB Power develops and delivers energy efficiency, energy conservation, and DSM initiatives. In its written decision in EUB Matter 0375, the EUB recognized that the *Electricity Act* directs the Board to consider NB Power's "demand-side management and energy efficiency plans" when approving or fixing rates.³⁵ The Board held that DSM plans proposed by NB Power should be evaluated by a cost-effectiveness test, and, after considering

³⁴ Energy and Utilities Board, NB Power 2018-2019 General Rate Application (Matter 0375) Transcript (File 194) at pages 1166-1168.

³⁵ At paragraph 105 of the decision, the EUB wrote that subsection 103(8) of the *Electricity Act* states that the Board "shall take into consideration [...] the Corporation's demand-side management and energy efficiency plans"; however, subsection 103(8) actually states that the Board *may*, not *shall*, take such plans into consideration. In other words, subsection 103(8) *empowers* but does not *require* the Board to consider the factors it lists.

several options, it held that the PACT was "the most appropriate evaluation standard for Energy Smart NB". 36

In the EUB's words, the PACT "compares the benefits from a utility perspective (such as avoided fuel costs) against the utility's investment, including program administration cost and customer incentives".³⁷ A score of 1.0 or higher means that the benefits outweigh the costs. In deciding to use the PACT to evaluate the cost-effectiveness of programs proposed by Energy Smart NB, the EUB determined that the test will be applied on a program basis ("rather than a portfolio or sector basis"), and that "[a]ny individual program that does not achieve a score of 1.0 or higher, using test year costs and benefits, will be deemed not to be cost effective".³⁸

Because the EUB's written decision in EUB Matter 0375 signals that DSM programs proposed by NB Power will be assessed under the PACT, it could be argued that if NB Power were to develop a DSM program designed for low-income homeowners, if that program were to pass the PACT, and if that program was independent from existing provincial programs (so as to avoid characterization as a program developed or delivered on the province's behalf), then the EUB could approve it just as it might approve any other cost-effective DSM program.

It is also worth noting that because subsection 117.1(c) refers to programs and initiatives targeting lowincome *homeowners*, specifically, there is also room to argue that programs and initiatives targeting other low-income demographics (such as renters) are not captured by the provision.

In my opinion, the interpretation that subsection 117.1(c) of the *Electricity Act* "precludes NB Power from funding low-income programs" is not the only interpretation that was available to the EUB. The interpretation went further than what was required to decide the question at hand, and, as a result, it imposes a sweeping statement on an issue that could be addressed with more nuance.

Notably, Nova Scotia's legislated electricity regime does not impose such limitations on NSPI. As is described in more detail in Part C of this report, Nova Scotia's *Public Utilities Act* requires NSPI to pay for energy efficiency and conservation activities that are provided by the province's efficiency franchise, which is currently EfficiencyOne. EfficiencyOne is able to propose energy efficiency and conservation activities that target low-income ratepayers, and NSPI is expected to pay for such activities using ratepayer funds. EfficiencyOne's proposed <u>Electricity Efficiency Plan for 2020-2022</u> and the UARB's decision in <u>EfficiencyOne (E1) (Re)</u>, 2019 NSUARB 105 (CanLII) demonstrate the approach that is currently being taken in Nova Scotia.

(b) Identifying Options for Moving Forward

There are at least two options available to organizations, groups, or individuals who would like to see NB Power developing and delivering energy efficiency, energy conservation, and DSM programs and initiatives for low-income homeowners (and perhaps other low-income demographics).

(i) Option 1: Argue an Alternative Interpretation of Subsection 117.1(c) of the *Electricity Act*

As noted above, my opinion is that the EUB's pronouncement that subsection 117.1(c) of the

³⁶ See EUB Matter 0375 Decision, *supra* note 3 at paragraphs 107-117.

³⁷ *Ibid* at paragraph 108.

³⁸ *Ibid* at paragraph 117.

Electricity Act "precludes NB Power from funding low-income programs" went further than was needed to decide the issue at hand in EUB Matter 0375, and it is not the only interpretation that was open to the Board. For these reasons, it may be possible to persuade the EUB to adopt a different interpretation in another hearing.

The success of an alternative interpretation would depend largely on the facts upon which it was based. For the reasons described above, my view is that the EUB would probably not accept that NB Power could use ratepayer funds for any energy efficiency, energy conservation, or DSM program or initiative targeting low-income homeowners that would be delivered on the province's behalf.

(b) Option 2: Engage in Law Reform Advocacy

If the EUB's interpretation of subsection 117.1(c) of the *Electricity Act* has produced effects that the Government of New Brunswick did not intend, the government may be open to amending the Act so that the nature of NB Power's capacity to develop and deliver energy efficiency, energy conservation, and DSM programs and initiatives is more clear.

Organizations, groups, and individuals who would like to see NB Power developing and delivering energy efficiency, energy conservation, and DSM programs and initiatives for low-income homeowners (and perhaps other low-income demographics) may therefore wish to advocate for *Electricity Act* amendments that would clearly empower NB Power to develop and deliver such programs and initiatives using ratepayer funds, whether such programs and initiatives are pursued independently by NB Power or developed and delivered on the province's behalf.

Part C: Nova Scotia

In Nova Scotia, the Minister with the primary responsibility to supervise electricity issues within the province is the Minister of Energy and Mines. Nova Scotia's main power player is NSPI: a privately owned but publicly regulated corporation governed primarily by the combined force of Nova Scotia's *Electricity Act* and *Public Utilities Act*. Nova Scotia's *Electricity Act* and its corresponding *Renewable Electricity Regulations* recognize six municipal utilities, which are listed in the regulations as the electric utilities for the Town of Antigonish, the Town of Berwick, the former Town of Canso, the Town of Lunenburg, and the Town of Mahone Bay, along with the Electric Light Commissioner for Riverport, in the County of Lunenburg.

Whereas New Brunswick's legislated electricity regime seems designed on the whole to preserve NB Power's monopoly on electricity generation, transmission, and distribution within New Brunswick, in recent years the Government of Nova Scotia has taken steps to introduce more opportunities for competitiveness into its legislated electricity regime. Specifically, amendments to the *Electricity Act* in 2015 established a foundation for a "renewables to retail" program designed to facilitate the competitive sale and purchase of renewable low-impact electricity within the province by creating a new licensing scheme for independent retail suppliers of renewable low-impact electricity.³⁹ Despite such initiatives, however, NSPI continues to retain a virtual monopoly on electricity generation, transmission, and distribution within Nova Scotia.

1. Primary Provincial Statutes and Regulations

This section organizes the primary statutes and regulations shaping Nova Scotia's legislated electricity regime into thematic clusters so that relationships between the individual pieces of legislation are clear.

(a) Legislation Controlling GHG Emissions and Enabling Provincial Carbon Pricing

Nova Scotia's <u>Environment Act</u> is the statute that enables the carbon pricing and GHG emissions reduction regimes that have been designed to lower the GHG emissions associated with Nova Scotia's electricity sector. Significant regulations under the Environment Act are the <u>Greenhouse Gas Emissions</u> <u>Regulations</u>, the <u>Quantification, Reporting and Verification Regulations</u>, and the <u>Cap-and-Trade</u> <u>Program Regulations</u>. As noted above, Nova Scotia's <u>Greenhouse Gas Emissions Regulations</u> are the basis for the Canada-Nova Scotia Equivalency Agreement that currently restrains the application of the federal <u>Coal-fired Electricity Regulations</u> in Nova Scotia. The cap-and-trade program that exists under the <u>Environment Act</u> and the <u>Cap-and-Trade Program Regulations</u> (with assistance from the <u>Quantification, Reporting, and Verification Regulations</u>) has prevented the application of the federal Greenhouse Gas Pollution Pricing Act within Nova Scotia.

³⁹ The "renewables to retail" program has not had much success to date. Under subsection 3G(1) of the *Electricity Act*, NSPI is required to develop whatever tariffs, procedures, and standards of conduct are be necessary to facilitate the purchase of renewable low-impact electricity that the program envisions and file such tariffs, procedures, and conduct with the UARB for approval. Under subsection 3G(2) of the *Electricity Act*, as the UARB considers whether to approve NSPI's proposed tariffs, procedures, and standards of conduct, it must be guided by two significant principles: (1) "customers of Nova Scotia Power Incorporated and persons who, at the coming into force of this Section, are independent power producers or hold feed-in tariff approvals within the meaning of the regulations <u>are not to be negatively affected if some retail customers</u> choose to purchase renewable low-impact electricity from a retail supplier"; and, (2) "<u>retail suppliers and their customers</u> are to be responsible for all costs related to the provision of service by retail suppliers to their customers that would <u>otherwise be the responsibility of Nova Scotia Power and its customers</u>" (emphasis added). To date, these requirements seem to be making it cost-prohibitive for independent retail suppliers to connect to the transmission and distribution grids managed by NSPI in order to get renewable low-impact electricity to market.

(b) Legislation Structuring NSPI and Defining the Primary Powers and Duties of Nova's Scotia's Electric Utilities

The <u>Nova Scotia Power Privatization Act</u> paved the way for the privatization of Nova Scotia's primary electric utility, and the <u>Public Utilities Act</u> defines the powers and duties of all public utilities within the province. Nova Scotia's <u>Electricity Act</u> and its corresponding <u>Renewable Electricity Regulations</u> give further definition to electric utilities' powers and duties by legislating renewable energy standards and creating renewable energy programs, and the <u>Electricity Efficiency and Conservation Restructuring</u> (2014) <u>Act</u> informs NSPI's current mandate to contract with EfficiencyOne for the delivery of energy efficiency and conservation activities throughout the province.

(c) Legislation Structuring and Defining the UARB's Role as the Electricity Regulator

Although multiple statutes and regulations contribute to the overall mandate of the UARB, the primary pieces of legislation that structure and define its role as the electricity regulator are the *Utility and Review Board Act*, which created the Board and defines its structure, and the *Public Utilities Act*, which identifies the Board's core powers and duties and frames them against the powers and duties of NSPI and other public utilities within the province. Several sets of regulations under the *Utility and Review Board Act* inform the structure of regulatory proceedings before the Board, and they include the <u>Utility</u> *and Review Board Regulations* and the <u>Costs Rules</u>. Additionally, the <u>Rules for the Regulation of</u> <u>Practice and Procedure</u>, which are regulations that exist under the *Public Utilities Act*, also inform the Board's processes.

(d) Legislation Dealing with Specific Electricity Issues

Certain electricity issues in Nova Scotia are dealt with under independent statutes and corresponding sets of regulations.

As their titles suggest, the <u>Maritime Link Act</u> and its corresponding <u>Maritime Link Cost Recovery</u> <u>Process Regulations</u> were created to deal specifically with the proposed construction of the Maritime Link Project that was designed to facilitate the import of electricity generated at the Muskrat Falls Generating Station in the Province of Newfoundland and Labrador. Significantly, the <u>Maritime Link</u> *Cost Recovery Process Regulations* gave the UARB a very specific mandate with respect to the proposed project: under subsection 5(1) of the regulations, the UARB was required to approve the project if the Board was satisfied that it represented "the lowest long-term cost alternative for electricity ratepayers" in Nova Scotia and that it was "consistent with obligations under the <u>Electricity</u> *Act*, and any obligations governing the release of greenhouse gases and air pollutants under the *Environment Act*, the *Canadian Environmental Protection Act* (Canada) and any associated agreements".

Nova Scotia's <u>Marine Renewable-energy Act</u> deals exclusively with Nova Scotia's marine renewable energy ambitions and the provincial government's commitment to supporting further research and development in that field. On the whole, the Act assigns most of the oversight required for its processes to the Minister of Energy and Mines and delegates little supervisory responsibility to the UARB.

(e) Visionary Legislation: The *Environmental Goals and Sustainable Prosperity Act* and the *Sustainable Development Goals Act*

In 2019, the Government of Nova Scotia moved to replace its existing <u>Environmental Goals and</u> <u>Sustainable Prosperity Act</u> ("EGSPA"), as amended, with a new statute, the <u>Sustainable Development</u> <u>Goals Act</u> (the "SDGA"). The SDGA is not yet in force, and it is not expected to come into force until regulations are developed under it.

From 2007 until 2020, *EGSPA* served as a legislated list of environmental goals to which the provincial government was committed. Among them were goals concerning the proportion of provincial electricity needs that would be met with renewable energy resources from 2013 to 2020. Subsection 2(b) of the Act as amended in 2012 expressed the goals that, of the province's total electricity needs, 18.5 percent would be obtained from renewable energy sources by 2013, 25 percent would be obtained from renewable energy sources by 2013, 25 percent would be obtained from renewable energy sources by 2020. Notably, subsection 2(a) of *EGSPA* also identified the government's intention to displace the use of oil and coal by enhancing the use of natural gas.

The goals set out in *EGSPA* were framed explicitly as *goals* rather than as binding legal obligations, but the Act played an important political role by laying a foundation for legislative amendments that created binding legal obligations under various other statutes and regulations. Notably, legally binding targets concerning the proportion of provincial electricity needs that would be met with renewable energy resources from 2013 to 2020 were implemented through a series of amendments to Nova Scotia's *Renewable Electricity Regulations* that created mandatory renewable electricity requirements for NSPI, municipal electric utilities, and certain independent power producers.

The *SDGA* does not include renewable electricity goals for Nova Scotia for 2020 and beyond, and such goals will need to be identified in the regulations that will be created under the Act. Although it is likely that the regulations under the *SDGA* will not impose binding legal obligations on the provincial government, NSPI, municipal electric utilities, or others, it is reasonable to expect that the government will take steps to achieve the goals set out in the *SDGA* regulations by making necessary amendments to other statutes and regulations. In that sense, the *SDGA* regulations will likely serve as a touchstone for provincial renewable electricity and energy efficiency goals.

2. Sources of Renewable and "Clean" Electricity Recognized by the Province

One striking difference between the electricity landscapes in New Brunswick and Nova Scotia is that the Government of Nova Scotia has prohibited NSPI from using nuclear generation as a source of electricity.⁴⁰

In the statutes and regulations that have been designed to lower the GHG emissions and increase the sustainability of Nova Scotia's electricity sector, three categorizations of electricity sources are noteworthy. They are: (a) "renewable electricity"; (b) "renewable low-impact electricity"; and (b) "low-emissions electricity".

⁴⁰ Subsection 48(2) of the *Public Utilities Act* states that NSPI "shall not construct a generating plant that utilizes nuclear energy to produce electricity". For an earlier example of the government's expectations in this regard, see subsection 8(1)(a) of the *Nova Scotia Power Privatization Act*, which requires NSPI's memorandum of association and articles of association to state that "the company shall not construct a generating plant that utilizes nuclear energy to produce electricity".

(a) "Renewable Electricity"

Subsection 3(1) of the *Renewable Electricity Regulations* defines "renewable electricity" as meaning "heritage renewable electricity", "renewable low-impact electricity generated after December 31, 2001", and "imported electricity that in the opinion of the Minister is generated from renewable resources".

Subsection 2(1) of the same regulations defines "heritage renewable electricity" as meaning "all electricity that was contracted for or supplied by a load-serving entity in the Province before January 1, 2002, and that, in the opinion of the Minister, is generated from renewable sources". Since the term "renewable sources" is not defined in the regulations, it is noteworthy that two of the defined forms of "renewable electricity" in Nova Scotia are sourced largely in the Minister's discretionary opinion as to what sources are renewable.

Subsection 2(2) of the *Electricity Act* states: "Commencing on such date as prescribed in the regulations, 'renewable electricity' includes hydroelectricity whether generated in or imported into the Province". Although the *Renewable Electricity Regulations* do not appear to speak directly to that subsection of the *Electricity Act*, it is clear that the Government of Nova Scotia intends imported hydroelectricity to be considered a renewable electricity, and subsection 3(1) of the *Renewable Electricity Regulations* clearly empowers the Minister to categorize imported electricity as renewable electricity when, in the Minister's opinion, such electricity is generated from renewable resources.

Notably, the *Renewable Electricity Regulations* require NSPI to meet its 40% renewable electricity standard for 2020 and beyond "by directly or indirectly acquiring, to deliver to customers in the Province, 20% of the electricity generated by the Muskrat Falls Generating Station if the Muskrat Falls Generating Station and associated transmission infrastructure is completed and in normal operation and the UARB has approved an assessment against NSPI under the *Maritime Link Act* and its regulations".

(b) "Renewable Low-Impact Electricity"

Subsection 3(1) of the *Renewable Electricity Regulations* defines "renewable low-impact electricity" as electricity produced from any of the following sources: "solar energy", "wind energy", "run-of-the-river hydroelectric energy", "ocean-powered energy", "tidal energy", "wave energy", "biomass that has been harvested in a sustainable manner", "landfill gas", and "any resource that, in the opinion of the Minister and consistent with Canadian standards, is able to be replenished through natural processes or through sustainable management practices so that the resource is not depleted at current levels of consumption".

Like the regulatory definition of "renewable electricity", the definition of "renewable low-impact electricity" incorporates some room for Ministerial discretion; here, however, the Minister's discretion is limited by the requirement that his, her, or their opinion be "consistent with Canadian standards".

(c) "Low-Emissions Electricity"

Section 2 of Nova Scotia's *Greenhouse Gas Emissions Regulations* defines "low-emissions electricity" as meaning "electric energy produced from any source of renewable energy, including any of the following": "solar energy", "wind energy", "biomass that has been harvested in a sustainable manner", "run-of-the-river hydroelectric energy", "ocean-powered energy", tidal energy, "landfill gas", "liquid biofuel and other biogas energy", "nuclear power", and "large hydro".

Interestingly, the *Greenhous Gas Emissions Regulations* only refer to low-emissions electricity once (apart from the section in which they define the term). The term appears in subsection 7(2), which imposes a requirement on facilities applying for new "transmission incentives" (increases in emissions caps granted in return for eligible investments) under the regulations. The subsection states: "An application for a new transmission incentive must include documentation demonstrating the facility owner has invested or will invest in new transmission capacity that has or will increase the facility owner's ability to move electrical power generated in the Province by sources of low-emissions electricity". Given that the sole provision mentioning low-emissions electricity within these regulations concerns electricity includes nuclear power, given the fact that the *Public Utilities Act* bars NSPI from constructing a generating plant that uses nuclear energy to generate electricity. Notably, the legislative use of the term "low-emissions electricity" appears to be unique to the *Greenhouse Gas Emissions Regulations*, which were created under the *Environment Act*: the term does not appear in the *Electricity Act*, the *Renewable Electricity Regulations*, or other legislation with direct bearing on Nova Scotia's electricity regime.

3. Renewable Electricity Targets

(a) Setting the Targets

Nova Scotia's current renewable electricity target is stagnant. Sequential versions of the *Renewable Electricity Regulations* have set targets for the amount of renewable low-impact electricity that loadserving entities were required to supply to their customers from 2011 on, and in the period between 2011 and 2020, those targets increased progressively, with the target for 2011 and 2012 being 5%, the target for 2013 and 2014 being 10%, the target for 2015, 2016, 2017, 2018, and 2019 being 25%, and the target for 2020 being 40%.

Subsection 6A(1) of the current *Renewable Electricity Regulations* states: "Each year beginning with the calendar year 2020, each load-serving entity must supply its customers with renewable electricity in an amount equal to or greater than 40% of the total amount of electricity supplied to its customers as measured at the customers' meters for that year". Notably, this 40% target is set to apply each year, indefinitely, beyond 2020, meaning that unless the *Renewable Electricity Regulations* are amended to include new targets, electric utilities in Nova Scotia are not required to incorporate progressively more renewable electricity in the supplies they provide to their customers.

Notably, when subsection 5(1A) was added to the *Electricity Act*, it required the Minister of Energy and Mines to make regulations setting a target for 40% renewable electricity by 2020. Nothing in the Act requires the Minister to set new targets beyond 2020.

Unlike New Brunswick's renewable electricity targets, the targets set out in Nova Scotia's *Renewable Electricity Regulations* apply to municipal electric utilities within the province as well, as such utilities are included within the meaning of the term "load-serving entity" used within the regulations. Not only does the renewable electricity standard for 2020 that is set out in subsection 6A(1) apply clearly to all load-serving entities within the province, but subsection 6A(4) sets out specific requirements under which municipal electric utilities must meet that standard. Specifically, subsection 6A(4) states that in order to meet the renewable electricity standard set out in subsection 6A(1), "a municipal electric utility

that purchases any of its electricity supply from a supplier other than NSPI must ensure that a minimum of 40% of that non-NSPI electricity supply is renewable electricity".

(b) Enforcing the Targets

Unlike New Brunswick's *Electricity from Renewable Resources Regulation*, Nova Scotia's *Renewable Electricity Regulations* include tailored enforcement provisions that apply specifically to Nova Scotia's renewable electricity regime.

Section 47 of the *Renewable Electricity Regulations* states:

47 (1) A person who does any of the following is liable to a daily penalty of no more than \$500 000 to a maximum aggregate of 10 000 000 per occurrence:

- (a) fails to comply with the requirements of Section 4, 5, 6 or 6A;
- (b) fails, neglects, omits or otherwise refuses to do any act or thing required in respect of Section 4, 5, 6 or 6A;
- (c) fails, neglects, omits or otherwise refuses to comply with a direction or order of the Minister to comply with Section 4, 5, 6 or 6A.
- (2) Unless otherwise provided in the Act, a person is not subject to a penalty under subsection (1) if the person establishes that they
 - (a) exercised due diligence; or
 - (b) reasonably and honestly believed in the existence of facts that, if true, would render the conduct of the person excusable.
- (3) No public utility may recover any penalty imposed on it under this Section through its rates.

As noted above, section 6A of the regulations is the section that imposes the current renewable electricity target of 40% in 2020 and beyond.

4. Responsibilities for Electricity Efficiency and Conservation Activities

(a) Who Bears the Responsibilities, and How Are They Defined?

Whereas New Brunswick's legislated electricity regime assigns responsibility for energy efficiency, energy conservation, and DSM programs and initiatives to NB Power, Nova Scotia's regime has a bifurcated structure in which the *Public Utilities Act* requires NSPI to pay for electricity efficiency and conservation activities that are provided by the "franchise holder" empowered under the *Electricity Efficiency and Conservation Restructuring (2014) Act*. The current franchise holder is the corporation EfficiencyOne.

Under subsection 79A(b) of the *Public Utilities Act*, the phrase "electricity efficiency and conservation activities" is defined as meaning "activities, programs or plans relating to":

- (i) the efficient use of electricity,
- (ii) the conservation of electricity,
- (iii) the alteration of the consumption pattern of an end-user of electricity that has the effect of reducing demand during Nova Scotia Power Incorporated's periods of highest demand,
- (iv) the utilization or management by Nova Scotia Power Incorporated of its electrical system in a more cost-effective manner,
- (v) the delivery of a reduction in the amount of electrical energy or capacity that Nova Scotia Power Incorporated would otherwise be required to supply to its customers, or
- (vi) any other prescribed activities, plans or programs.

Subsection 79C(1) of the *Public Utilities Act* empowers the Minister of Energy and Mines to grant an electricity efficiency and conservation franchise, and subsection 79C(2) states that a franchise granted by the Minister "gives the franchise holder the exclusive right to supply Nova Scotia Power Incorporated with reasonably available, cost-effective electricity and conservation activities" within the purpose of the *Public Utilities Act*.

(b) Is Cost-Effectiveness Required?

As noted above, subsection 79C(2) of the *Public Utilities Act* states that a franchise granted by the Minister "gives the franchise holder the exclusive right to supply Nova Scotia Power Incorporated with reasonably available, cost-effective electricity and conservation activities" within the purpose of the *Public Utilities Act*. Additionally, under section 79I of the Act, NSPI is required to "undertake cost-effective electricity efficiency and conservation activities that are reasonably available in an effort to reduce costs for its customers" by contracting with the franchise holder (or, if a situation arises where there is no franchise holder, in a manner approved by the UARB).

The *Public Utilities Act* gives the UARB a specific mandate concerning both the franchise holder and the relationship between the franchise holder and NSPI. Subsection 79G(1) of the Act states that the Board "has the general supervision of a franchise holder in relation to the franchise holder's franchise activities", and the effect of section 79G on the whole is to make the franchise holder a public utility for the purposes of the Act and empower the Board to oversee its activities accordingly. Notably, section 79H goes even further and states that the UARB "shall determine the cost-effective electricity and conservation activities that must be undertaken for the purpose of this Act": a responsibility that gives the Board considerable influence over the investments in electricity efficiency and conservation activities that NSPI is allowed to make.

(c) Cost-Effectiveness Testing

Whereas New Brunswick's EUB uses the PACT to assess the cost-effectiveness of DSM programming,

the UARB currently uses the Total Resource Cost Test (while recognizing its ability to use other tests, such as the PACT, if it chooses to do so).⁴¹

(d) Digging More Deeply into "Affordable" Energy Efficiency and Conservation Activities

Sections 79L and 79M of the *Public Utilities Act* identify specific procedural and substantive considerations concerning the UARB's responsibility to assess and approve or reject proposed agreements between the franchise holder and NSPI, and two provisions within them are particularly significant. Subsections 79L(8) and 79L(9) state:

79L(8) The Board shall approve an agreement pursuant to this Section if, in addition to any other matters considered appropriate by the Board, it is satisfied that the agreement, including the proposed electricity efficiency and conservation activities that are the subject of the agreement, is in the best interests of Nova Scotia Power Incorporated's customers and satisfies the requirements of Section 79J.

(9) The Board's assessment of the proposed electricity efficiency and conservation activities for the purpose of the approval <u>must take into account their affordability to Nova Scotia Power</u> <u>Incorporated's customers</u>, along with any other matters considered appropriate by the Board or as may be prescribed. (emphasis added)

The meaning and implications of these subsections were at issue in an application before the UARB in 2015, and the Board's written decision in that matter will inform the way the UARB and others will interpret them going forward.⁴²

In 2015, EfficiencyOne and NSPI applied to the UARB for approval of a supply agreement for electricity efficiency and conservation activities and the approval of a 2016-2018 DSM resource plan. One of the issues that came up during the hearing was Board's responsibility to consider the affordability of electricity efficiency and conservation activities proposed by NSPI and EfficiencyOne. The *Public Utilities Act* does not define the term "affordability" for the purposes of subsections 79L(8) and 79L(9), and so the Board had to determine how it would interpret "affordability" when exercising its mandate under those provisions. In its written decision—archived as *EfficiencyOne (Re)*, 2015 NSUARB 204 (CanLII)—the Board determined that the provincial government's inclusion of the word "affordability" in subsection 79L(9) of the Public Utilities Act directs the Board "to take into account an increased focus on short term rate impacts", as opposed to long-term benefits and impacts alone.⁴³ As the Board went on to explain, this does not mean that it will focus only on short-term costs and ignore the potential for long-term savings; ultimately, the "overarching consideration" for the Board is "the best interests of Nova Scotia Power Incorporated's customers", as is stated in subsection 79L(8). It does mean, however, that when the UARB is assessing proposed spending on electricity efficiency and conservation activities, short-term cost impacts will be given more weight than they would receive in assessments of other applications before the Board.

⁴¹ See *Efficiencyone (Re)* 2020, *supra* note 4 at paragraph 43.

⁴² The decision in question is <u>EfficiencyOne (Re)</u>, 2015 NSUARB 204 (CanLII). ["EfficiencyOne (Re) 2015"]. The UARB has already followed it in <u>EfficiencyOne (E1) (Re)</u>, 2019 NSUARB 105 (CanLII).

⁴³ See *EfficiencyOne (Re) 2015*, supra note 42 at paragraph 82.

5. Programs Requiring or Enabling the Purchase of Locally Generated Renewable Electricity

Nova Scotia's *Electricity Act* is the legal foundation for regulations setting out a number of locally generated renewable electricity programs that have been implemented in Nova Scotia, and Nova Scotia's *Renewable Electricity Regulations* are the place where those programs have been defined in detail.

Sections 18-35 of the *Renewable Electricity Regulations* set the parameters for the Community Feed-in Tariff ("COMFIT") Program, which is no longer in operation (although contracts established under it remain in effect). Sections 35A-37 of the regulations set the parameters under which NSPI can procure renewable low-impact electricity in accordance with section 4B of the *Electricity Act*, and sections 37A-37F set the parameters for the Solar Electricity for Community Buildings Program that was established for the years 2017, 2018, and 2019 under subsection 4C(1) of the *Electricity Act*. These programs were designed to incent investment in community-owned or small-scale renewable electricity generation within the province: notably, the COMFIT program produced a number of wind turbine developments that are now contributing to NSPI's renewable electricity portfolio, and the Solar Electricity for Community Buildings Program has facilitated the development of solar PV arrays that are or will be feeding into NSPI's system.

Under section 6A of the *Renewable Electricity Regulations*, NSPI is required to meet its 40% renewable electricity standard for 2020 and beyond by supplying "at least 5% of its total annual sales from independent power producers" and acquiring "at least 300 GWh from independent power producers in addition to the renewable low-impact electricity required to meet the requirements of Sections 4 and 5" of the regulations. Through those requirements, the programs enabling locally generated renewable electricity are linked to NSPI's renewable electricity target.

As noted above, the *Renewable Electricity Regulations* also require NSPI to meet its 40% renewable electricity standard for 2020 and beyond "by directly or indirectly acquiring, to deliver to customers in the Province, 20% of the electricity generated by the Muskrat Falls Generating Station if the Muskrat Falls Generating Station and associated transmission infrastructure is completed and in normal operation and the UARB has approved an assessment against NSPI under the *Maritime Link Act* and its regulations". In other words, not only do the *Renewable Electricity Regulations* assume that NSPI will rely heavily on receiving electricity from the Muskrat Falls Generating Station as a way to maintain its renewable electricity standard, but the regulations actually *require* NSPI to do so.

6. Reliability and Performance Standards

NSPI's operations are conditioned by two standards regimes: a reliability standards regime maintained and monitored by American institutions, and a performance standards regime created and monitored by the UARB.

(a) Reliability Standards

NSPI is subject to the reliability standards developed by the North American Electric Reliability Corporation ("NERC") and the Northeast Power Coordinating Council, Inc. ("NPCC"). The NPCC monitors NSPI's compliance with those standards, and the UARB has power and responsibility to enforce NSPI's compliance.⁴⁴

⁴⁴ See <u>Nova Scotia Power Incorporated (Re)</u>, 2016 NSUARB 193 (CanLII) at paragraph 12 ["NSPI (Re) 2016"].

(b) Performance Standards

Amendments to the *Public Utilities Act* in 2015 required the UARB to establish and enforce performance standards for NSPI concerning "reliability", "response to adverse weather conditions", and "customer service". The amendments were made after public consultations made it clear to the Government of Nova Scotia that ratepayers were not satisfied with NSPI's provision of services and that they desired more transparency and accountability concerning the utility's performance.⁴⁵

The UARB established NSPI's performance standards for reliability, "adverse weather response", and customer service in 2016.⁴⁶ These standards are distinct from and operate over and above the reliability standards set by the NERC and NPCC.

The adverse weather response standards set by the UARB are described at paragraphs 96-107 of the UARB's decision in *Nova Scotia Power Incorporated (Re)*, 2016 NSUARB 193 (CanLII). The standards include a number of benchmarks dealing with NSPI's performance in answering customer calls and providing relevant information to customers, as well as a metric addressing the percentage of customers whose power is restored within 48 hours following a severe weather event. The benchmarks for that metric are based on NSPI's historical averages since 2004, minus one standard deviation, and are to be updated annually.⁴⁷

7. The Powers and Duties of the Utility and Review Board

The UARB oversees a large and diverse regulatory landscape, and multiple pieces of Nova Scotian legislation define its authority and jurisdiction.

In 1992, Nova Scotia's *Utility and Review Board Act* combined four existing administrative boards the Board of Commissioners of Public Utilities, the Expropriations Compensation Board, the Nova Scotia Municipal Board, and the Nova Scotia Tax Review Board—and consolidated their responsibilities under the purview of a single regulator, the UARB. Despite its significance as the statutory source of the UARB's existence, the *Utility and Review Board Act* says little about the Board's actual mandate. Its primary purpose is to define the structure of the Board and address practical matters like the Board's procedural and adjudicative powers and responsibilities. On the whole, the Act leaves the work of defining the Board's more specific functions, powers, and duties to other statutes and regulations that impose specific mandates.

The UARB's mandate as Nova Scotia's electricity regulator comes primarily from the *Public Utilities Act* and the *Electricity Act*. Regulations made under those Acts, such as the *Renewable Electricity Regulations* that exist under the *Electricity Act*, also play an important role. Additionally, independent statutes like the *Maritime Link Act* and its corresponding *Maritime Link Cost Recovery Process Regulations* have the power to shape the UARB's mandate significantly insofar as it concerns the specific issues that such pieces of legislation cover: as noted above, for example, under the *Maritime Link Act* and the *Maritime Link Cost Recovery Process Regulations*, the UARB was legally obliged to approve the proposed Maritime Link Project if the project passed the assessment test that the government directed the UARB to perform.

⁴⁵ See Government of Nova Scotia, *Our Electricity Future: Nova Scotia's Electricity Plan, 2015-2040* at pages 13-14.

⁴⁶ See the UARB's decision in *NSPI (Re)* 2016, *supra* note 44.

⁴⁷ *Ibid* at paragraphs 101-103.

Like those of the EUB, the UARB's powers and duties are shaped by the statutes and regulations that establish the Board and define its responsibilities. The UARB is limited by the laws that create and constrain its authority: it cannot do anything that the Government of Nova Scotia has not empowered it to do.

Sections 15-47 of the *Public Utilities Act* set out many of the primary powers and duties of the UARB; however, because the Board's fundamental role as a regulatory supervisor means that its responsibilities are informed by the legal obligations belonging to the utilities under its supervision, legal obligations assigned to NSPI and others under the *Public Utilities Act, Electricity Act*, and other relevant statutes and regulations should be understood as triggering corresponding powers and obligations for the Board.

Section 18 of the *Public Utilities Act* is a significant mandate section which states that the Board "shall have the general supervision of all public utilities, and may make all necessary examinations and inquiries and keep itself informed as to the compliance by the said public utilities with the provisions of law and shall have the right to obtain from any public utility all information necessary to enable the Board to fulfil its duties". Notably, section 18 is complemented and expanded by section 47, which states that the Board "may inquire into any neglect or violation of the laws or regulations in force in the Province by any public utility doing business therein, or by the officers, agents or employees thereof, or by any person operating the plant of any public utility, and shall have the power, and it shall be its duty, to enforce the provisions of this Act as well as all other laws relating to public utilities". Whereas section 18 *empowers* the UARB to oversee public utilities' activities and consider whether the public utilities are complying with relevant laws, section 47 actually *obliges* the Board to enforce all of the laws that are relevant to the utilities under its supervision. In broad terms, this means that any duty imposed on a public utility by legislation triggers a corresponding oversight and enforcement duty for the Board.

(a) The UARB's Mandate to Ensure the Reasonable Safety, Adequacy, Justness, and Reasonableness of Services and Facilities

Section 52 of the *Public Utilities Act* states that "[e]very public utility is required to furnish service and facilities reasonably safe and adequate and in all respects just and reasonable". Given the UARB's mandate to ensure public utilities' compliance with all relevant laws, it is no surprise that the UARB's responsibility to approve or fix just and reasonable rates and tariffs is reflected throughout the *Public Utilities Act*. A corresponding obligation that conditions the roles and responsibilities of the UARB and the utilities under its supervision is the obligation to ensure that services are provided in a non-discriminatory manner. This obligation to ensure the adequacy, justness, and reasonableness of services. For example, subsection 83(1) of the Act states:

Upon complaint made to the Board against any public utility by any municipal corporation or by any five persons, firms or corporations, that any of the rates, tolls, charges or schedules are in any respect unreasonable or unjustly discriminatory or that any regulation, measurements, practice or act whatsoever affecting or relating to the operation of any public utility is in any respect unreasonable, insufficient or unjustly discriminatory or that the service is inadequate or unobtainable, the Board shall proceed, with or without notice, to make such investigation as it deems necessary or expedient, and may order on such terms and subject to such conditions as are just that the public utility furnish reasonably adequate service and facilities and make such extensions as may be required [....] Importantly, the language of "discrimination" that occurs throughout the *Public Utilities Act* is very old—it stretches back to the genesis of the provincial government's regulation of public utilities more than a century ago—and it refers primarily to situations in which public utilities may be tempted to engage in arbitrary overcharging or undercharging, or wilful preferential or disadvantageous treatment, rather than consistently requiring like compensation for like services. This underlying concern is expressed most clearly by subsection 67(1) of the Act, which states:

All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.

Not only is the *Public Utilities Act*'s conception of "discrimination" different from more expansive understandings of discrimination that recognize direct and indirect systemic inequities, but the underlying purpose and structure of the Act have actually been interpreted as *preventing* the UARB from advancing or approving social justice initiatives targeting certain forms of inequity.

Two decisions by the UARB, along with corresponding decisions by the Nova Scotia Court of Appeal, that address the affordability of electricity rates in Nova Scotia and the ways in which poverty (and energy poverty) is experienced disproportionately by racial minorities, recent immigrants, single mothers and their children, and others have demonstrated that both the UARB and Nova Scotia's courts accept that the concepts of "justness", "discrimination", and the "public interest" within the *Public Utilities Act* are intended primarily to address the reality that "[a]n unregulated monopolist may have market power to restrict supply below what would be the competitive level, charge prices above what would be the competitive level, and discriminate arbitrarily among consumers in price or supply".⁴⁸ These decisions have accepted that the UARB's mandate is to prevent NSPI from exercising its monopoly unjustly, not to ensure that electricity is actually affordable and accessible for all, and, further, they have held that subsection 67(1) and related provisions of the *Public Utilities Act* actually *prevent* the UARB from advancing or approving affordable electricity programs such as rate assistance programs, because the provision requires that like charges be charged for like services without "discrimination" (i.e., differential pricing) between persons receiving those services.

Because the UARB is limited by the laws that create and constrain its authority and cannot do anything that the Government of Nova Scotia has not empowered it to do, making room for more progressive social justice advocacy before the Board will require law reform advocacy. Importantly, because the UARB's powers and duties are entwined with the powers and duties of the utilities it regulates, changes to the Board's mandate can be triggered by changes to the powers and duties of public utilities like NSPI. For example, if the Government of Nova Scotia were to require NSPI—through statute or regulation—to implement low-income programming to reduce energy poverty or to invest in energy efficiency measures designed specifically to counteract inequities caused by environmental racism, then the UARB would be required to ensure that NSPI was meeting its obligations.

In the absence of such changes, efforts to expand the UARB's mandate by encouraging the Board to

⁴⁸ <u>Boulter v Nova Scotia Power Incorporation, 2009 NSCA 17 (CanLII)</u> at paragraph 5. See also the UARB's decision in <u>Nova Scotia Power Inc, Re, 2005 NSUARB 27 (CanLII)</u>, the subsequent decision of the Nova Scotia Court of Appeal in <u>Dalhousie Legal Aid Service v Nova Scotia Power Inc, 2006 NSCA 74 (CanLII)</u>, and the UARB's decision in <u>Affordable Energy Coalition, Re, 2008 NSUARB 11 (CanLII)</u>.

adopt broader interpretations of concepts such as "justness" and "discrimination" will struggle to find success.

(b) Participating in Proceedings before the UARB

Section 6 of the <u>Utility and Review Board Regulations</u> states that the UARB "shall permit any person who is determined by the Board to have a real and substantial interest in the subject-matter of the proceeding to participate in the hearing".

The UARB's *Board Regulatory Rules* describe two opportunities for formal participation in proceedings before the Board:

- participation as a formal intervenor, and
- participation by letter of comment.

Subsection 11(1) of the *Board Regulatory Rules* allows "any interested person" to apply to intervene in a proceeding, and subsection 11(2) empowers the Board to accept or refuse an application to intervene. Importantly, being an "interested person" means more than simply being curious about the issue: in administrative and legal proceedings such as these, having an "interest" means having some kind of clear stake in the matter.

Differently, subsection 11(6) pf the *Board Regulatory Rules* empowers "any interested person who does not wish to intervene in the application but who wishes to make comments to the Board regarding the application" to file a letter of comment with the Board for consideration during the proceeding. This letter of comment must be served on the applicant who initiated the proceeding as well as being filed with the Board, and once it has been served and filed properly, the Board will distribute copies to the other parties to the proceeding.

Importantly, these two opportunities for formal participation are mutually exclusive: under subsection 11(9) of the *Board Regulatory Rules*, a person who choose to participate by letter of comment cannot participate as an intervenor as well.

8. Special Issue: Public-Interest Environmental Advocacy before the UARB

Whereas New Brunswick's legislated electricity regime includes a Public Intervener appointed under *An Act Respecting a Public Intervenor for the Energy Sector*, Nova Scotia's legislated electricity regime does not include an equivalent role: instead, Nova Scotia's *Public Utilities Act* authorizes both the Government of Nova Scotia and the UARB to appoint persons to act as a consumer advocate or small business advocate in hearings before the Board. This section comments on the legal structures that could enable the appointment of an "environmental advocate" that could participate in UARB hearings like the consumer advocate and small business advocate do.

Sections 91 and 92 of the *Public Utilities Act* provide the legal foundations for the consumer advocate and small business advocate.

Section 91 states, in part:

91(1) Where the Governor in Council directs or the Board on its own motion decides, the Board shall appoint a person to act as a consumer advocate in a hearing before the Board.

- (2) A consumer advocate appointed pursuant to subsection (1)
 - (a) shall participate in all aspects of the hearing before the Board and <u>represent the interests of residential consumers</u> as a full intervenor with power to enter into settlement agreements with other parties; and
 - (b) has all the powers and authorities necessary to carry out the duties of a consumer advocate pursuant to this Section. (emphasis added)

Section 92 states, in part:

[...]

(2) Where the Governor in Council directs or the Board on its own motion decides, the Board shall appoint a person to act as a small business advocate in a hearing before the Board.

(3) A small business advocate appointed pursuant to subsection (2)

- (a) shall participate in all aspects of the hearing before the Board and <u>represent the</u> <u>interests of small business</u> as a full intervenor with power to enter into settlement agreements with other parties; and
- (b) has all the powers and authorities necessary to carry out the duties of a small business advocate pursuant to this Section. (emphasis added)

As may be seen from the underlined portions of the provisions quoted above, the consumer advocate's role is to represent the interests of residential consumers, and the small business advocate's role is to represent the interests of small business.

Importantly, the language of sections 91 and 92 of Nova Scotia's *Public Utilities Act* is *permissive*, not *imperative*, meaning that the sections *empower* the provincial government and the UARB to appoint a consumer advocate and small business advocate to advocate in a hearing before the Board, but they do not *require* either the provincial government or the UARB to do so. This means that the presence of a consumer advocate or small business advocate at a UARB hearing is a discretionary matter, and in the absence of an express direction from the government, the UARB could choose not to allow either advocate to participate.

The legal statuses of Nova Scotia's consumer advocate and small business advocate are considerably weaker than the status of New Brunswick's Public Intervener. Under subsection 49(1) of New Brunswick's *Energy and Utilities Board Act*, the EUB is required to notify the Public Intervener whenever a proceeding is initiated before the Board. The Board has no discretion in that regard: it *must* give formal notice to the Public Intervenor. Additionally, subsection 49(3) of the *Energy and Utilities Board Act* states:

With respect to those matters within the responsibility of the Public Intervener under *An Act Respecting a Public Intervener for the Energy Sector*, the Public Intervener shall be deemed to be a party to all proceedings before the Board, regardless of whether the Public Intervener has notified the Board of his or her intention to intervene.

Effectively, subsection 49(3) of the *Energy and Utilities Board Act* creates a default setting in which the Public Intervener is automatically a party to any proceeding that involves matters within its jurisdiction. Whereas Nova Scotia's UARB can choose whether or not to appoint a consumer advocate or small business advocate (in the absence of an express direction from the government), New Brunswick's EUB has no such discretion. In this regard, the New Brunswick regime has a stronger legislative platform for public-interest advocacy before the electricity regulator.

As discussed above, the UARB is limited by the laws that create and constrain its authority: it cannot do anything that the Government of Nova Scotia has not empowered it to do. The UARB has an overarching public-interest mandate, and its responsibility to ensure that the utilities under its supervision are complying with all relevant laws includes responsibilities to ensure that relevant environmental laws are being followed. This suggests that there could be a role for an environmental advocate under the current regime.

It is important to keep in mind, however, that within Nova Scotia's current legislated electricity regime, the UARB has no explicit mandate to advance social justice or equitable considerations in matters relating to electricity or energy efficiency and conservation, and even if the Government of Nova Scotia were to create an environmental advocate to participate in electricity hearings before the UARB, the environmental advocate's ability to engage in progressive environmental advocacy would be limited by the scope of the UARB's jurisdiction and mandate. For this reason, the more progressively the role of an environmental advocate is imagined, the more likely it is that achieving that vision will require law reform advocacy that seeks to expand the UARB's jurisdiction and mandate to consider nuanced intersections between environmental issues, social justice and equity, and the public interest.

Conclusion

The analyses conducted throughout this report demonstrate that the legislated electricity regimes in New Brunswick and Nova Scotia have significant similarities as well as significant differences.

At the intersections of the federal and provincial government powers, there are two key differences between the New Brunswick and Nova Scotian regimes:

- The federal *Coal-fired Electricity Regulations* currently apply in New Brunswick but do not apply in Nova Scotia, as the Canada-Nova Scotia Equivalency Agreement accepts that Nova Scotia's *Greenhouse Gas Emissions Regulations* will serve the federal government's purpose.
- The federal *Greenhouse Gas Pollution Pricing Act* applies partially in New Brunswick (it imposes an Output-Based Pricing System on large industrial emitters), but it does not apply in Nova Scotia.

Within the provincial regimes themselves, a fundamental difference is that NB Power is a Crown corporation whereas NSPI is publicly owned but publicly regulated. Another key difference is that New Brunswick currently produces nuclear-generated electricity and may expand that industry in the future, whereas NSPI is barred from generating electricity through nuclear generation.

The following tables highlight additional differences between the two regimes, along with similarities, focusing specifically on the themes of affordability, reliability, and sustainability.

	New Brunswick	Nova Scotia
Fundamental Obligation	rates must be "just and reasonable"	rates must be "just and reasonable"
Affordable Rates for Low- Income Ratepayers	our research did not find any EUB or New Brunswick court decisions on this topic	the UARB is barred from implementing rate-assistance programs for low-income ratepayers
Affordability of Energy Efficiency, Energy Conservation, and DSM Programming	the EUB has determined that NB Power cannot develop and deliver energy efficiency, energy conservation, and DSM programs and initiatives for low- income homeowners unless those programs and initiatives are funded by the province	NSPI is not barred from using ratepayer funds to pay for energy efficiency and conservation services that target low- income ratepayers in Nova Scotia all energy efficiency and conservation services approved by the UARB must be "affordable", and the UARB has interpreted the word "affordable" as requiring, in this context, additional attention to short-term costs to ratepayers as well as long-term costs and benefits

Table 2: Affordability

Table 3: Reliability

	New Brunswick	Nova Scotia
Fundamental Obligation	Section 71 of the <i>Electricity Act</i> requires NB Power to maintain a reliable integrated electricity system	Section 52 of the <i>Public Utilities Act</i> requires NSPI to furnish service and facilities that are reasonably safe and adequate; the word "reliable" is not used specifically in the Act
Reliability Standards	under the <i>Reliability Standards</i> <i>Regulation</i> , NB Power and the EUB are expected to apply the reliability standards approved by the FERC, although those standards may be modified as necessary	NSPI is subject to the reliability standards developed by the NERC and the NPCC; the NPCC monitors NSPI's compliance with those standards, and the UARB has power and responsibility to enforce NSPI's compliance
Performance Standards	the Government of New Brunswick and EUB have not imposed performance standards on NB Power	amendments to the <i>Public Utilities Act</i> in 2015 required the UARB to impose performance standards on NSPI addressing reliability, adverse weather response, and customer service; the UARB set standards in 2016; the performance standard for adverse weather response uses NSPI's historical performance as a benchmark for the applicable metric

Table 4: Sustainability

	New Brunswick	Nova Scotia
Renewable Electricity Target	40% by December 31, 2020; no increasingly ambitious targets set beyond that time	40% by 2020; no increasingly ambitious targets set beyond that time
Enforceability Measures Applicable to the Renewable Electricity Target	general measures available under the <i>Electricity Act</i>	specific measures set out in the Renewable Electricity Regulations
Categorization of Renewable Electricity	" <u>electricity from renewable sources</u> " is defined by section 2 of the <i>Electricity</i> <i>from Renewable Resources Regulation</i> as meaning: "electricity that is generated inside the Province in an innovative manner and provides a net environmental benefit to the Province", "electricity generated inside or outside the Province from a source", and "electricity that is obtained under the Large Industrial Renewable Energy Purchase Program" with respect to the phrase "electricity generated inside or outside the Province from a source", the term "source" is given further definition within section 2 and is defined as including: "solar energy", "wind energy", "hydroelectric energy", "ocean-powered energy", "biogas energy", "biomass energy", and "sanitary landfill gas"	 "renewable electricity" is defined by subsection 3(1) of the <i>Renewable Electricity Regulations</i> as meaning "heritage renewable electricity", "renewable low-impact electricity generated after December 31, 2001", and "imported electricity that in the opinion of the Minister is generated from renewable sources" "renewable low-impact electricity" is defined by subsection 3(1) of the <i>Renewable Electricity Regulations</i> as meaning electricity produced from any of the following sources: "solar energy", "wind energy", "run-of-the-river hydroelectric energy", "ocean-powered energy", "tidal energy", "wave energy", "biomass that has been harvested in a sustainable manner", "landfill gas", and "any resource that, in the opinion of the Minister and consistent with Canadian standards, is able to be replenished through natural processes or through sustainable management practices so that the resource is not depleted at current levels of consumption" "low-emissions electricity" is defined by section 2 of the <i>Greenhouse Gas Emissions Regulations</i> as meaning "electric energy roduced from any source of renewable energy", "und energy", "biomass that has been harvested in a sustainable manage", "solar energy", "wind energy produced from any source of renewable energy, including any of the following": "solar energy", "wind energy", "biomass that has been harvested in a sustainable manner", "run-of-the-river hydroelectric energy", "cean-powered energy", tidal energy, "landfill gas", "liquid biofuel and other biogas energy", "nuclear power", and "large hydro"

Responsibilities for Energy Efficiency, Energy Conservation, and DSM Programs and Initiatives	responsibility held by NB Power, per the <i>Environment Act</i>	per the <i>Public Utilities Act</i> , NSPI is required to pay for energy efficiency and conservation activities provided by the provincial efficiency franchise, which is currently EfficiencyOne
Programs Designed to Incent Private Investment in Small- Scale Electricity Generation	LORESS, under the <i>Electricity from</i> <i>Renewable Resources Regulation</i>	"renewables to retail", COMFIT, and Solar Electricity for Community Buildings Program, under the <i>Electricity</i> <i>Act</i> and <i>Renewable Electricity</i> <i>Regulations</i>