



NEW BRUNSWICK
ENERGY & UTILITIES BOARD

COMMISSION DE L'ÉNERGIE ET DES SERVICES PUBLICS
NOUVEAU-BRUNSWICK

REASONS FOR DECISION

IN THE MATTER OF an application by
New Brunswick Power Corporation
with respect to proposed changes to
its rate structure, rate classes and
rate design.

(Matter No. 529)

October 27, 2023

Matter 529 – NB Power Rate Design

IN THE MATTER OF an application by New Brunswick Power Corporation with respect to proposed changes to its rate structure, rate classes and rate design. (Matter No. 529)

APPLICATION: June 28, 2022

ORAL HEARING: June 7 to 15, 2023

DECISION: July 28, 2023

BEFORE:

Christopher Stewart
Presiding Member

Heather Black
Member

Stephanie Wilson
Vice-Chairperson

APPLICANT:

New Brunswick Power Corporation (NB Power)

John Furey

INTERVENERS:

Agricultural Alliance of New Brunswick

Anna Belliveau

David Amos

per se

Canadian Federation of Independent Business

Louis-Philippe Gauthier

Canadian Manufacturers & Exporters

Ron Marcolin

J.D. Irving, Limited

Nancy Rubin, K.C.

Twin Rivers Paper Company Inc.

Len Hoyt, K.C.

Union of Municipalities of New Brunswick

Dan Murphy

Utilities Municipal

Scott Stoll

PUBLIC INTERVENER:

Alain Chiasson

Table of Contents

1 Introduction and summary conclusions..... 1

2 Rate design background..... 2

3 The hearing process and public participation..... 3

4 Issues..... 4

 Addressing inequity in the current rate structure – Section 5..... 4

 Specific issues to be resolved in Phase 2 – Section 6 5

 Sequence and timing for future phases – Section 7 5

 Confirmation of compliance with Board Direction – Section 8 5

 Other rate-setting issues – Section 9..... 5

5 Addressing inequity in the current rate structure 6

 5.1 The Board will not adopt the term “approval in concept” 7

 5.2 Commercial and industrial rate reclassification is reasonable 8

 5.2.1 Reclassifying business customers would reduce inequity 9

 5.2.2 The proposal forms a reasonable basis for classifying distribution customers 10

 5.2.3 The plan to develop the proposal for approval is reasonable, subject to Direction 12

 5.2.4 The proposed reclassification is reasonable for further analysis and refinement 13

 5.3 NB Power is directed to eliminate the GS II class by April 1, 2025 14

 5.4 Rate eligibility modifications for non-domestic customers are reasonable 16

 5.4.1 Limiting eligibility to small non-domestic customers would reduce inequity 17

 5.4.2 The plan to develop the proposal for approval is reasonable, subject to Direction 18

 5.4.3 The proposal is reasonable for further analysis and refinement..... 20

 5.4.4 Extending eligibility to mid-sized charitable lodging loads is not reasonable 21

 5.5 The proposed sequence and timing are approved, subject to Directions..... 21

 5.5.1 NB Power is ordered to implement new business classes and rates by April 1, 2027 22

 5.5.2 The GSII class will be eliminated as directed in Section 5.3..... 23

 5.5.3 NB Power is directed to seek non-domestic customer eligibility approval in Phase 2a..... 23

 5.5.4 The Board will not set a process for improving revenue-cost ratios in this proceeding 23

 5.5.5 The proposed sequence and timing are approved, subject to Directions..... 24

 5.6 The proposals for competitive products and services are approved 24

 5.6.1 The proposed portfolio approach is approved 25

 5.6.2 The Board approves including the proposed products and services in the CES Portfolio.. 26

Matter 529 – NB Power Rate Design

5.6.3 The proposed cost allocation study changes are approved 27

6 Specific rate design issues to be considered in Phase 2 28

6.1 The proposed Net Zero Rate calculation methodology is approved 28

6.1.1 The proposed offering may improve the existing rate design..... 29

6.1.2 The rate calculation methodology is approved 30

6.2 Public and fleet EV charging will be considered in Phase 2..... 32

6.3 Small-customer EV charging and large-scale self-generation will be considered in Phase 2..... 33

6.4 The net metering program will be reviewed in Phase 2..... 35

6.5 The Board will consider an approval process for a regulatory sandbox..... 38

7 Sequence and timing for Phase 2 and future rate design activities 40

8 Confirmation of compliance with foundational Directions 41

9 Other rate-setting issues..... 42

10 Conclusion..... 43

1 Introduction and summary conclusions

- [1] As part of its obligation to set just and reasonable rates for NB Power, the Board ensures that rates are structured to reflect the cost of providing service to the utility's customers, encourage the efficient use of energy and achieve desirable strategic and policy objectives.
- [2] This proceeding is the first phase of an extensive, three-phase regulated process to design a modern rate structure for NB Power that aligns with the Board's rate design goals:
1. Reducing any inequity that may exist or may be caused by the current rate structure (on a short-term, medium-term, and long-term basis);
 2. Establishing a rate design methodology that is easily adaptable to future changes (including changing technologies and the business environment); and
 3. Establishing a rate design methodology that is clear, manageable, and predictable, allowing customers, utilities, the government, and stakeholders to make the necessary investments and appropriate behaviour changes.
- [3] The focus of this proceeding is to establish a foundation for future rate design changes by reducing historical inequities and charting a clear and manageable course for future phases of the process.
- [4] To reduce historical inequities in the existing rate structure, the Board:
- a. approves the elimination of the General Service II class and determines that NB Power's other proposed rate design solutions are reasonable for the purpose of conducting further analysis and refinement, except for its proposal regarding mid-sized non-domestic charitable lodging;
 - b. directs NB Power to file the necessary applications and supporting evidence for the Board to approve precise rate design solutions in a future proceeding; and
 - c. approves changes to its regulatory approach for competitive products and services.
- [5] The Board directs NB Power to file the necessary applications and supporting evidence to examine other potential sources of inequity in the existing rate structure in future

Matter 529 – NB Power Rate Design

proceedings and consider rate design changes that may result in a rate design methodology that reflects the Board's rate design goals.

- [6] The Board also establishes a sequence and approximate timeline to resolve these issues in upcoming phases of this regulatory process, implement solutions, and approve and implement other rate design activities that the utility may propose to undertake.

2 Rate design background

- [7] Rate design is a regulatory term describing a utility's price structure. A utility's price structure impacts how customers use energy in their homes and businesses and their decisions to invest in new equipment. It also influences choices made by the utility and other stakeholders to use and develop resources and may have broad social, environmental, and economic consequences.
- [8] According to traditional rate design principles, rates should give a utility a reasonable opportunity to recover its regulated revenue requirement. Typically, rates should be set based on customer cost causation to spread system cost recovery and benefits fairly among all customers. However, it may be appropriate to compromise cost-based considerations in favour of competitive or strategic considerations or to meet policy objectives. These core principles remain the foundation for a modern rate design that successfully adapts to changing technology, customer expectations and climate change policy. The Board's goals for a modernized NB Power rate design reflect these principles.
- [9] The Board established a three-phase regulatory process for modernizing NB Power's rate design in recognition of the diversity and complexity of the issues. Phase 1, culminating in this Decision, establishes a foundation for future rate design changes by addressing historical inequities in the current rate structure and charting a clear and manageable course for future phases of the process.
- [10] The primary focus of Phase 1 is evaluating rate design measures that NB Power proposes to introduce to reduce inequity in the existing rate structure. In rate design, inequity typically refers to unjustified rate differences between customers who share similar cost-of-service characteristics not justified by competitive, strategic, or policy-based reasons.
- [11] Cost-based equity between rate classes requires revenue generated by a class of customers to recover the costs of providing service to that class. The comparison of revenues and costs for each rate class is known as the revenue-cost ratio for that class. Revenues that recover 100 percent of the costs of a class have a ratio of 1.0. For practical purposes, the Board considers that revenue-cost ratios that are reasonably close to 1.0

Matter 529 – NB Power Rate Design

achieve inter-class equity, meaning equity among rate classes. The revenue-cost ratios for some of NB Power’s rate classes are outside a reasonable range. The ratios for the General Service I and Small Industrial classes have historically been high, indicating that those customers pay more than the cost incurred to provide service, while the Residential class revenue-cost ratio has been low, meaning that Residential customers pay less than the cost incurred to provide service to them.

- [12] References in this Decision to revenue-cost ratio “improvement” describe regulatory efforts to move the ratios for all rate classes reasonably close to 1.0 to achieve inter-class equity. This can be accomplished using rate design measures like redefining rate classes, reassigning customers to rate classes or redesigning rate components within a class. It can also be achieved with rate-setting measures, specifically imposing higher rate increases for some classes than for others until equity is restored, though the Board does not engage in rate-setting in this Decision.
- [13] In Matter 357, the Board directed NB Power to pursue several opportunities to use rate design measures to improve revenue-cost ratios by aligning the composition of some rate classes with similarities in cost-to-serve and considering whether cost-of-service rate design characteristics are no longer appropriate for some rate classes. Section 5 of this Decision evaluates NB Power’s response to these Directions. In Section 6, NB Power identifies other potential opportunities to reduce inequity in the existing rate structure.
- [14] Rate design changes intended to resolve existing inequity in the rate structure will inevitably result in some customers paying higher prices and others paying lower prices. Large and sudden bill impacts on customers are generally considered undesirable, so utilities implement changes gradually or apply other measures to allow negatively affected customers to adapt to the changes over time, an approach known as rate gradualism.
- [15] The other focus of this Phase 1 proceeding is to identify issues that will be considered and related timing for future phases of the regulatory process. NB Power filed a “Roadmap” that sets out the potential sequence and timing for its rate design activities and regulatory filings considered in this Decision and for consideration in future phases of the regulatory process over the next several years.

3 The hearing process and public participation

- [16] Appendix A lists the parties to this proceeding and describes each witness who gave written and oral testimony. NB Power, J.D. Irving, Limited, the Public Intervener and Board staff made witnesses available for cross-examination during the oral hearing.

Matter 529 – NB Power Rate Design

- [17] When this proceeding commenced, NB Power implemented a public information and engagement process to inform customers and stakeholders about its application, provide information on how the public could participate in the regulatory process, and answer questions. NB Power reported its results to the Board, including copies of materials, details about the feedback received from stakeholders, and plans for further engagement.
- [18] Before the oral hearing, the Board heard two presentations from members of the public who participated in a virtual public session hosted by the Board. The Board also received three letters of comment. Submissions from the public are not treated as evidence under the Board’s Rules of Procedure, which would otherwise be subject to interrogatory inquiries and cross-examination. However, they form part of the public record, and the Board considers them in deliberations. The Board appreciates the efforts of those who made submissions or presentations.

4 Issues

- [19] The focus of this proceeding is on evaluating proposed rate design measures to reduce inequity in the existing rate structure, identifying issues for consideration in Phase 2 and establishing a timeline for these and other issues to be addressed during future phases of the regulatory process.

Addressing inequity in the current rate structure – Section 5

- [20] In Section 5 of this Decision, the Board considers several NB Power requests that respond to previous Board Directions aimed at addressing historical inequities in the rate structure.
- [21] NB Power proposes rate design solutions to correct inequitable deviations from cost-of-service considerations in the existing rate structure and suggests a timeline for final approval and implementation. NB Power also proposes establishing pricing guidelines and a cost allocation approach for competitive products and services where cost-of-service rate design considerations are inappropriate.
- [22] The Board must determine whether the proposed solutions will reasonably advance the Board’s rate design goal of reducing inequity in the existing rate structure and establish a reasonable sequence and timeline considering the interdependent nature of the proposals and the key activities required to implement them.

Matter 529 – NB Power Rate Design

Specific issues to be resolved in Phase 2 – Section 6

- [23] In Section 6 of this Decision, the Board considers several NB Power requests raising specific rate design issues, outlining potential solutions, and seeking the Board’s direction for these issues to be resolved in Phase 2 of this regulatory process.
- [24] NB Power asks the Board to examine several potential sources of inequity in the rate structure arising from changing customer behaviour that may reduce NB Power’s revenue without a proportionate decrease in the utility’s costs. NB Power also suggests ways to reduce that inequity by reassessing cost-of-service rate design considerations in the face of emerging technologies or departing from cost-of-service rate design considerations to satisfy superseding policy or strategic objectives.
- [25] The Board must determine whether reviewing these issues in Phase 2 may result in a rate design methodology that reflects the Board’s rate design goals.

Sequence and timing for future phases – Section 7

- [26] In Section 7 of this Decision, the Board considers NB Power’s request for direction on the sequence and approximate timing to resolve the issues raised in Section 6 of this Decision, implement solutions, and approve and implement other rate design activities that the utility may propose to undertake. NB Power’s proposed sequence and timing appear in the revised rate design Roadmap in Exhibit NBP 14.01.
- [27] The Board must determine whether the proposed sequence and timing are reasonable to be used as a guide in filing future rate design applications.

Confirmation of compliance with Board Direction – Section 8

- [28] In Section 8 of this Decision, the Board confirms that NB Power has complied with previous Directions to continue its load research program and file the results and submit a proposal addressing the issue of under-represented customers in this rate design process.

Other rate-setting issues – Section 9

- [29] In Section 9 of this Decision, the Board approves NB Power’s request to continue its current practices for adjusting its non-sufficient funds charge, late payment charge, and electric vehicle (EV) charging rates from time to time based on individual circumstances and management judgment, instead of applying approved general rate increases to them.

5 Addressing inequity in the current rate structure

- [30] The requests considered in this Section 5 respond to Board Directions aimed at addressing historical inequities in the rate structure.
- [31] As Section 2 of this Decision describes, an equitable rate classification scheme groups customers with similar costs to serve unless otherwise justified for strategic or policy reasons. NB Power proposes to correct inequitable deviations from cost-of-service rate design considerations by:
- a. eliminating and replacing the commercial and industrial rate classes to improve the way rate classes reflect similar costs to serve (Section 5.2); and
 - b. eliminating the General Service II class to end its historical preferential rate and restore a cost of service-based rate design for all General Service customers (Section 5.3); and
 - c. modifying eligibility rules for the Residential rate classes to end historical preferential rates for specific non-domestic customers and assigning them to rate classes that are similar to them in cost to serve (Section 5.4); and
 - d. implementing these proposals on a timeline that recognizes the relevant constraints and dependencies (Section 5.5).
- [32] NB Power also proposes establishing pricing guidelines and a cost allocation approach for competitive products and services where cost-of-service rate design considerations are inappropriate (Section 5.6).
- [33] Subject to the Orders and Directions in this Decision, the Board concludes that the proposed new business rate classes and modified Residential rate class eligibility requirements for small non-domestic customers are reasonable for the purpose of conducting further analysis and refinement and approves the sequence and approximate timing for those proposals. The Board is not yet satisfied that the proposal to extend Residential rate class eligibility to medium-sized charitable lodging customers is reasonable.
- [34] The Board also approves eliminating the General Service II class by April 1, 2025, and the proposals to establish a regulatory approach for competitive products and services.

5.1 The Board will not adopt the term “approval in concept”

- [35] NB Power presents the fundamental elements of the proposed rate design solutions in Sections 5.2 and 5.4 for the Board’s “approval in concept” because they are not yet fully developed. The utility intends to conduct further analysis and refinement of the proposals before seeking final approval from the Board.
- [36] NB Power explained that its requests for “approval in concept” seek the Board’s approval “presumptively on a final basis,” meaning that the proposals would be approved on a final basis in a future application unless further analysis reveals “something dramatically different” proving that the concept is “broken” in a way that would influence the Board’s decision.
- [37] NB Power views this approach as necessary to make progress toward modernizing NB Power’s rate design within the phased structure of these proceedings. Mr. Coady described the phased proceeding as intended to address issues in one phase and move on to the next round of issues in subsequent phases without resetting or restarting the process each time an intervener wishes to raise or revisit an issue. He noted that the Board will never have perfect data, and parties will have different perspectives on how to proceed with rate design modernization.
- [38] NB Power’s requests for “approval in concept” raised questions among the interveners as to whether further debate of the merits of the proposed solutions would be proscribed if they were approved in this proceeding. These concerns appear to the Board to have been borne out of a disconnection between NB Power’s description of what an “approval in concept” means in the abstract and how it would apply practically.
- [39] NB Power described an “approval in concept” of a proposed rate design as an approval that is final, subject only to any unanticipated impediment that NB Power subsequently brings to the Board’s attention and approval of refinements such as detailed class definitions, class cost of service specific rates, terms and conditions, the approach to monitoring and updating individual customer classifications, bill impacts, and customer communication plans.
- [40] However, this framework cannot easily be applied to the specific proposals for which NB Power seeks “approval in concept” because they are not uniformly developed or supported. Fundamental elements of the proposal in Section 5.2 remain undetermined pending additional study, and the proposal in Section 5.4 will be assessed using new load data before final approval is sought. Further, these proposals were developed using a cost

Matter 529 – NB Power Rate Design

allocation methodology currently under review by the Board because it may create inequities between rate classes.

- [41] The rate design implications of these studies, a new cost allocation methodology, and new cost data are unknown at this time but are relevant and material to the Board’s evaluation and are required for customers to understand the impact of the proposed rate design changes fully. The changing background for rate design arising from potential technology-driven load changes, the forthcoming integrated resource plan, significant NB Power debt, a potentially steep rate trajectory, and continued risk of delays in implementing NB Power’s advanced metering infrastructure (AMI) program may also affect rate design issues.
- [42] The Board shares Mr. Coady’s desire to avoid resetting or revisiting issues in future phases but considers the unavailable data and analysis required to finalize these proposals to surpass the typical “imperfect data” with which regulators must make decisions. While the Board acknowledges that regulators may approve a conceptual or general approach and require a utility to file a specific proposal at a later stage, it does not adopt the term “approval in concept” in this Decision for this reason and because the term suffers from a lack of a shared understanding of the procedural consequences of approval.
- [43] The Board agrees with the submissions of the interveners who urged the Board to refrain from locking itself into rigid policies or plans before considering newly available data in future phases of these proceedings. At the same time, the Board is mindful of the need to give NB Power sufficient certainty in its guidance to equip the utility to make meaningful progress toward reducing inequity in the rate structure without expending effort and resources to flesh out potential solutions that are inappropriate for New Brunswick.
- [44] The Board evaluates the reasonableness of each proposal in Sections 5.2 and 5.4 for the purpose of conducting further analysis and refinement, gives Directions to guide further development of the proposals and any reasonable alternatives, and establishes a timeline to consider the proposals for final approval.

5.2 Commercial and industrial rate reclassification is reasonable

- [45] The request considered in this Section proposes eliminating and replacing the commercial and industrial rate classes to better align the rate classes with similar costs to serve.
- [46] NB Power categorizes its commercial and industrial customers according to the nature of the customer’s business. In other words, these customers are assigned to the “General

Matter 529 – NB Power Rate Design

Service” or “Industrial” classes based on whether their business is commercial or industrial. This approach to classifying business customers raises questions about whether two customers creating similar costs for the utility and with similar usage patterns may be treated differently in the rates they pay.

- [47] The utility proposes eliminating these classes and replacing them with small, medium, and large distribution-connected business classes measured by each customer’s maximum billing demand using boundaries of 20 kW and 750 kW and at least one transmission-connected class. The utility proposes studying the potential segmentation of transmission-connected customers before determining whether to create one or more transmission-connected classes.
- [48] NB Power is asking the Board to approve the proposal in concept pending further analysis and refinement before seeking the Board’s approval of class definitions and associated rates. This work involves studying the potential segmentation of the transmission-connected class, developing tariff terms and conditions for the new classes, and considering mechanisms to mitigate bill impacts for transitioning customers.
- [49] For the reasons in this Section 5.2, the Board is satisfied that the proposal is reasonable for the purpose of conducting further analysis and refinement before final Board approval of detailed rate classes and related rates because
- a. it would reduce potential rate differences between customers with similar costs to serve, thereby reducing inequity in the existing rate structure;
 - b. it forms a reasonable basis for the classification of distribution-connected customers; and
 - c. subject to the Directions in paragraph 69, NB Power’s plan to develop the proposal for final approval is reasonable, including the study of the potential segmentation of transmission-connected customers.

5.2.1 Reclassifying business customers would reduce inequity

- [50] The Board concludes that the proposed reclassification of commercial and industrial customers would reduce inequity in the existing rate structure by reducing potential rate differences between customers with similar costs to serve.
- [51] NB Power filed the expert opinion of Christensen Associates in support of its proposal. In their report, Christensen Associates identified and compared several options for

Matter 529 – NB Power Rate Design

alternative rate classifications, from which NB Power selected the option it considered to be most reasonable.

- [52] The expert evidence shows that the current classifications create a potential for rate differences between customers with similar costs to serve. Christensen Associates described the potential for significant rate differences between customers with similar costs to serve as a “leading disadvantage” of end-use classifications compared to the size and voltage-based alternatives they evaluated in their report. Mr. Knecht reached a similar conclusion that the proposed method “reduces the potential that similarly situated customers face substantially different rates.” No expert witness recommended retaining the current classes.
- [53] No party opposed the proposed classification approach, subject to further analysis as proposed. Ms. Rubin and Mr. Stoll expressed their clients’ agreement with the direction being taken by NB Power in proposing to segment these classes based on size and voltage level considerations, and the Public Intervener agreed that the proposal is consistent with industry practice.
- [54] The Board, therefore, finds that the proposed reclassification of commercial and industrial customers would reduce potential rate differences between customers with similar costs to serve, thereby reducing inequity in the existing rate structure.

5.2.2 The proposal forms a reasonable basis for classifying distribution customers

- [55] Christensen Associates found that NB Power’s customers are mostly not separable into well-defined groups by size, except possibly very large customers, because of a continuous distribution of energy and peak demand. They observed that the absence of well-defined groups gives NB Power broad flexibility to select boundaries that suit its rate design purposes and offered three long-term alternatives for classification: by voltage service level, by customer size measured by non-coincident peak demand, and by a combination of voltage service level and size.
- [56] NB Power selected a combination of voltage service level and size as the basis for its proposal. Specifically, NB Power proposed separating distribution voltage and transmission voltage customers into separate classes and further segmenting distribution-connected customers into small, medium, and large distribution-connected business classes measured by each customer’s maximum billing demand using boundaries of 20 kW and 750 kW, consistent with the existing 20 kW boundary for imposing demand charges within the General Service classes and the existing 750kW lower bound for the Large Industrial class.

Matter 529 – NB Power Rate Design

- [57] Mr. Porter testified that separating distribution and transmission voltage customers into separate classes is a “fairly obvious demarcation point” for NB Power because transmission customers tend to be larger. The expert evidence indicates that delineating rate classes in this fashion would reasonably reflect differences in the cost to serve those two groups of customers. Christensen Associates illustrated the tendency for transmission-connected customers to be larger than distribution-connected customers in Figure 5 of their report and identified the potential for greater flexibility in matching revenues with costs as an advantage of explicitly separating transmission-connected customers from distribution-connected customers. Mr. Bowman and Ms. Davies recommended that the Board approve this element of the proposal because the use of assets is a key cost characteristic and an appropriate basis for separating customers into their own class.
- [58] While voltage service level could be used to separate distribution-connected customers instead of customer size, no party advocated for this alternative or offered further alternatives that were not based on customer size.
- [59] The proposal sets boundaries for the distribution-connected classes based on customer size, measured by maximum demand in a billing period. This is known as the customer’s non-coincident peak demand. Mr. Chernick offered alternative measurements of customer size for the Board’s consideration. He suggested measuring customer size by total annual energy consumption or coincident peak demand instead of non-coincident peak demand, as NB Power proposes.
- [60] The Board is not persuaded that either of these measures would be superior to non-coincident peak demand. While customer size can be measured differently, there is no evidence that coincident peak is used for classification in other jurisdictions. Using non-coincident peak data is consistent with industry practice, and NB Power already uses that data for classification and billing purposes. Christensen Associates also noted that non-coincident peak demand has the practical advantage of being more stable over time than total consumption or coincident peak demand, lowering the risk that customers at the boundaries would experience frequent reclassification.
- [61] Mr. Chernick’s suggestion to use coincident peak demand was based on its value as an indicator of generation and transmission costs. Christensen Associates disputed that class boundaries should be based on generation and transmission characteristics. They believe class boundaries should be based on distribution characteristics because generation and transmission characteristics do not vary across customers. Mr. Bowman and Ms. Davies agreed with this conclusion as it pertains to distribution-connected classes.

Matter 529 – NB Power Rate Design

[62] Based on the expert evidence, the Board concludes that non-coincident peak demand is a reasonable measure of customer size and that classifying distribution-connected customers by size is a reasonable way to reflect similarities in cost to serve. Mr. Knecht characterized the proposal as generally reasonable, counting its simplicity and ease of understanding as advantages. The Board agrees that using non-coincident peak measurements to align the proposed distribution-connected classes with boundaries NB Power already uses for rate design purposes may simplify the transition to new rate classes and offer some administrative advantages.

[63] The Board, therefore, finds that the proposed segmentation of the distribution classes forms a reasonable basis for classifying distribution-connected customers.

5.2.3 The plan to develop the proposal for approval is reasonable, subject to Direction

[64] The plan submitted by Mr. Furey and Ms. Rubin to study the potential segmentation of transmission-connected customers before determining whether to create one or more transmission-connected classes is reasonable because it is consistent with the expert recommendations in this proceeding.

[65] Mr. Bowman and Ms. Davies recommended that the Board direct NB Power to investigate further segmentation of transmission-connected customers. In their view, further segmentation may be warranted because of differences in load profiles and electricity usage patterns among transmission-connected customers, particularly the top few largest customers, and the potential for other rate design benefits.

[66] While Mr. Porter testified that NB Power has seen no well-defined change in unit cost to serve across transmission-connected customers that would identify an appropriate breakpoint for further subdivision, Mr. Bowman's and Ms. Davies's recommendation is grounded, in part, on their claim that Christensen Associate's analysis relied on NB Power's current class cost allocation study and did not adequately account for seasonal cost differences for the largest transmission customers. In their view, further analysis must consider cost determinants, including seasonality and other rate design factors.

[67] Mr. Bowman's and Ms. Davies's recommendation that NB Power study the issue of further segmentation is consistent with the recommendations of other expert witnesses, though they did not share the opinion that further segmentation is necessarily warranted. Mr. Knecht and Mr. Chernick both agreed that the issues Mr. Bowman and Ms. Davies raised could be addressed through rate design within a single transmission class, but they did not object to further study. Mr. Knecht saw practical advantages in leaving the possibility open at this stage that another transmission class may be reasonable, while

Matter 529 – NB Power Rate Design

Mr. Chernick acknowledged the possibility that further segmentation could be justified based on fairness.

[68] No party opposed studying further segmentation of the transmission class. Mr. Stoll took no position on whether further segmentation is warranted but supported further study of the issue. The Public Intervener did not advocate for further segmentation but acknowledged the value of developing the proposal with two transmission classes as additional analysis proceeds.

[69] Based on the evidence, the Board concludes that these issues merit further analysis as proposed. The Board, therefore, directs NB Power to study, consider and model a single transmission-connected class and further segmentation of transmission-connected customers, including but not limited to segmentation of those transmission-connected customers with demand exceeding 25 MW. The Board directs NB Power to complete this work before seeking the Board's approval of new classes and rates for commercial and industrial customers and to report the results to the Board as part of its application for approval of new classes and rates for commercial and industrial customers.

[70] Mr. Furey submitted that NB Power's request for approval of its proposal "in concept" respects Mr. Chernick's recommendation to finalize the class definitions only after a new cost allocation methodology and cost data are available. This submission is consistent with the record in this proceeding, in which NB Power has indicated that its further analysis and refinement of this proposal will involve detailed class definition, class cost of service, specific rates, terms and conditions, the approach to monitoring and updating the classification of individual customers, bill impacts and the plans for communicating with customers.

[71] Therefore, subject to the Directions in paragraph 69, the Board concludes that NB Power's plan to develop the proposal for final approval, as revised by the joint submission, is reasonable.

5.2.4 The proposed reclassification is reasonable for further analysis and refinement

[72] Based on the findings and conclusions in this Section 5.2, and subject to the Directions in paragraph 69, the Board concludes that the proposal for reclassifying commercial and industrial customers is reasonable for the purpose of conducting further analysis and refinement.

[73] Section 5.5.1 of this Decision establishes the approximate timing for a proceeding to consider the final approval of new business classes and associated rates. All interveners urged the Board to maintain sufficient authority in that proceeding to confirm or adjust

Matter 529 – NB Power Rate Design

the boundary lines and number of subclasses. For the reasons in Section 5.1 of this Decision regarding the conceptual nature of this request, the Board will consider the results of NB Power's further analysis in that proceeding, and any other relevant and material new evidence submitted by NB Power, Board staff or other parties.

5.3 NB Power is directed to eliminate the GS II class by April 1, 2025

- [74] The request considered in this Section proposes to eliminate the General Service II (GSII) class, eligibility for which is based on historical policy reasons instead of similar cost to serve.
- [75] GSII customers have been "grandfathered" in a separate General Service class for more than 17 years for policy reasons that are no longer relevant. Eliminating the GSII class would reduce inequity by treating similar customers more equally because there is a material rate difference between the GSI and GSII classes that does not reflect differences in the relative cost to serve those customers. The Board previously directed NB Power to propose an action plan for the timely elimination of the GSII class to reduce inequity in the utility's rate structure.
- [76] In its application, NB Power proposed eliminating the General Service II (GSII) class when implementing the new business rate classes for commercial and industrial customers. At the hearing, utility witnesses and Mr. Furey indicated that the utility has no objection to consolidating the two classes by April 1, 2025, instead of following its original proposal.
- [77] The Board approves the elimination of the GSII class by April 1, 2025, for the reasons in this Section 5.3.
- [78] NBP's original proposal will prolong the inequity between GSI and GSII customers for several years, subject to whatever revenue-cost ratio improvements can be made through differential rates. This pace does not satisfy Mr. Knecht and Mr. Chernick. They believe the inequity caused by the GSII class's continued existence warrants a more immediate resolution.
- [79] In Mr. Knecht's opinion, the continued existence of the GSII class is inequitable because grandfathered GSII customers pay different rates than identical new customers. He recommends phasing out the GSII rate as quickly as possible, subject to reasonable gradualism constraints. Mr. Chernick had a similar view. He described eliminating the GS II class as the self-evident result of a belief that GSI is disadvantaged compared to GSII under current rates. He recommended that the Board direct NB Power to consolidate the classes in the next general rate application to reduce the revenue-cost ratio for current

Matter 529 – NB Power Rate Design

GS I customers immediately. Mr. Chernick sees this approach as part of a more significant effort to pursue equitable rates for GS customers aggressively.

- [80] No party objected to the consolidation of the two General Service classes to eliminate the GSII class.
- [81] Mr. Porter and Ms. Stevensen highlighted the issue of bill protection in their testimony, cautioning that a sudden elimination of the GSII class would cause abrupt and significant bill impacts for a small number of GSII customers. They explained NB Power’s view that a short-term process for eliminating the GSII class must include measures to mitigate the impact of the transition on significantly affected customers. Mr. Porter noted that the utility would need to construct a detailed bill protection tool, which requires the utility to consider the duration of the protection and how to recover any revenue shortfall, along with deciding whether to move GSII customers to GSI or merge the classes into a new rate.
- [82] Based on the expert evidence, the Board finds that eliminating the GSII class by April 1, 2025, would reduce inequity in the existing rate structure in the short term, while the impact on customers can be mitigated by using the transitional tools Mr. Porter and Ms. Stevensen described in their testimony. This approach aligns with NB Power’s goal to move forward with progress on rate design in this proceeding without being vulnerable to the risk of delay to which the other proposals are exposed, as described in Section 5.5 of this Decision.
- [83] The Roadmap suggests two potential filing timelines: October 2023 as part of the 2024-2025 general rate application or during the 2024-2025 year as part of the Phase 2a rate design proceeding. The Board accepts Mr. Porter’s testimony that NB Power could not implement the plan before April 1, 2025, in either case, because of the work required to build the design and bill protections.
- [84] Mr. Knecht and Mr. Chernick recommended that the Board address specific tariff changes and evaluate rate impacts as part of rate proceedings. The Public Intervener supported these recommendations. The Board agrees that addressing specific rate changes in a general rate application is appropriate because doing so would establish the tariff in the context of all relevant rate-setting factors.
- [85] Based on this evidence, the Board directs NB Power to file a proposal as part of a general rate application to eliminate the GSII class no later than April 1, 2025, and, if appropriate, to propose bill protection for former GS II customers.

5.4 Rate eligibility modifications for non-domestic customers are reasonable

- [86] The request considered in this Section proposes changes to align rules governing non-domestic customer eligibility for Residential rates with similarities in cost to serve.
- [87] NB Power’s existing tariff allows farms and places of worship to access Residential rates. Some charitable organizations and premises with lodging are also billed at Residential rates because of long-standing grandfathering exceptions, while others are billed at commercial rates. A non-domestic customer that qualifies for Residential service will likely experience materially lower bills than a non-qualifying customer because there is a significant difference between the Residential rate class price level and that of GSI. For non-domestic customers, this engenders interest in remaining in the Residential rate class.
- [88] NB Power proposes to limit Residential rate eligibility to farms, places of worship, premises with lodging, and certain charitable organizations that are similar to Residential customers in their energy use and load characteristics, provisionally defined as premises with consumption of less than 60,000 kWh per year and less than 20kW demand in any given month. Non-domestic customers that do not meet these thresholds would transfer to the appropriate business rate category when the new business classes are implemented.
- [89] NB Power is asking the Board to approve the proposal in concept pending further analysis and refinement before seeking the Board’s approval of rate eligibility guideline modifications. This analysis would use forthcoming load data to significantly improve the utility’s understanding of the cost to serve these non-domestic customers relative to other customers.
- [90] For the reasons in this Section 5.4, the Board is satisfied that the proposal is reasonable for the purpose of conducting further analysis and refinement before final Board approval of detailed rate classes and related rates because
- a. it would reduce potential rate differences between customers with similar costs to serve, thereby reducing inequity in the existing rate structure; and
 - b. while the Board is not yet satisfied that the proposal forms a reasonable basis for determining Residential rate eligibility for non-domestic customers, NB Power’s plan to develop the proposal for final approval is reasonable, subject to the Directions in paragraph 108.

5.4.1 Limiting eligibility to small non-domestic customers would reduce inequity

- [91] The Board concludes that NB Power’s proposed modifications to the Residential rate eligibility requirements for non-domestic customers would reduce inequity in the existing rate structure by reducing potential rate differences between customers with similar costs to serve. The Board accepts NB Power’s submission that the logical basis for its proposed modifications extends to premises with lodging, even though these customers were not specifically contemplated in the Board’s previous Direction.
- [92] NB Power filed the expert evidence of Mr. Chapman in support of its proposal. He described the proposal as “sensible and forward-looking” because, among other reasons, it aligns class membership for non-domestic customers based on size in a similar way to other customers and includes a plan to increase understanding of the cost of serving these customers. Concerning small lodging customers, Mr. Chapman noted that using size characteristics as a basis for eligibility is likely an improvement over keeping track of the number of beds.
- [93] Mr. Knecht also had a favourable assessment of the proposal compared to the current eligibility rules for non-domestic customers. He noted that the current rules produce inequitable rate differences by allowing large farms and customers who have been “grandfathered” for over 40 years to access Residential rates. While he suggested that minimizing the rate difference between the Residential and General Service classes could mitigate this problem, he acknowledged the uncertainty that this could be accomplished in the short term and called the proposal “a step in the right direction” that would establish clearer and less discriminatory rules for Residential class eligibility.
- [94] Mr. Havumaki, however, was not convinced that the proposal would reduce existing inequity. Despite characterizing the proposed approach as reasonable and generally coherent, he recommended that the Board direct NB Power to fully justify why a change in the status quo for non-domestic Residential customers is necessary and urged the Board to refrain from endorsing the proposed modifications. Mr. Havumaki’s skepticism is founded on his opinion that transferring non-domestic customers out of the Residential class would be equitable only if those customers were “acceptably” similar to business customers in their cost to serve because of the risk of potentially significant bill impacts from demand charges. It remains unclear to him whether NB Power will assess its provisional eligibility requirements through this lens.
- [95] The Board is persuaded by Mr. Chapman’s and Mr. Knecht’s conclusion that the proposal is more equitable than the status quo because Mr. Havumaki’s recommendation considered only its impact on newly disqualified customers. The Board disagrees that NB

Matter 529 – NB Power Rate Design

Power should assess its provisional thresholds with a singular view to whether affected customers are “acceptably” similar to business customers in cost to serve. This perspective fails to adequately account for the value of improving equity for non-domestic customers who may become eligible under the modified guidelines and for other Residential and business customers.

[96] While bill impacts for affected customers are a relevant concern in rate design, they are also a logical outcome of reducing inequity in the existing rate structure. Further, the proposal incorporates several tools to lessen the impact of the transition for customers who would no longer be eligible for Residential rates. NB Power’s Roadmap contemplates moving ineligible non-domestic customers to business rates when the proposed new business classes are implemented and to provide bill protection for transitioning customers. In the meantime, differential rate increases may reduce the difference between the revenue-cost ratios of the General Service and Residential classes to diminish non-domestic customer preference for Residential service. These elements, combined with NB Power’s plan to establish the peak demand boundary in harmony with current size distinctions in the General Service rate, may ease the impact of the transition for affected customers.

[97] The Public Intervener was the only intervener who specifically addressed this issue. He agreed with Mr. Knecht’s conclusions that grandfathered eligibility results in inequitable rates and that larger non-residential customers should not be eligible for Residential rates because of their size and because they likely have different cost characteristics. He submitted that the proposal to make small non-domestic customers eligible for Residential rates is not unreasonable, subject to further analysis of the thresholds, but that improving the revenue-cost ratios would mitigate the need for these changes.

[98] Based on the expert evidence, the Board finds that the proposed rate design would reduce inequitable rate differences between customers with similar costs to serve, thereby reducing inequity in the existing rate structure.

5.4.2 The plan to develop the proposal for approval is reasonable, subject to Direction

[99] While the Board is not yet satisfied that the proposal forms a reasonable basis for determining Residential rate eligibility for non-domestic customers, the Board concludes that NB Power’s plan to develop the proposal for final approval is reasonable, subject to the Directions in paragraph 108.

[100] NB Power intends to use load research data from a sample of farms, religious organizations, and charities (non-profits) to understand their demand and energy

Matter 529 – NB Power Rate Design

behaviours better. NB Power indicates that the data will be used to assess the reasonableness of the proposed eligibility requirements and, potentially, adjust them before seeking the Board’s approval of Residential rate eligibility modifications.

[101] Ms. Stevensen explained that the sample is expected to yield usable data by April 1, 2024. NB Power indicated that additional data is required to analyze further and refine the proposal because the available Residential load research data does not adequately represent non-domestic customers. The utility expects that AMI deployment may also allow for better analysis.

[102] Mr. Porter suggested that NB Power “would be looking to lock down” the proposed energy threshold based on the evidence on the record. Still, he recognized that there might be a need to adjust the demand threshold on further analysis if the load sample data and awareness of customer impact would influence the Board’s decision. He predicted that the proposed thresholds would disqualify an “insignificant” number of customers but acknowledged that the utility does not yet have the customer demand data to estimate the number of affected customers.

[103] The evidence indicates that 95 percent of Residential customers meet the proposed thresholds. Still, the Board can only be satisfied that those thresholds are reasonable by awaiting the forthcoming load data. NB Power’s limited understanding of the cost to serve these non-domestic customers and the impact of its proposal on potentially ineligible customers raise questions about the reasonableness of the thresholds, and the evidence does not support the proposed limitations on charitable eligibility.

[104] The expert testimony on this issue shows that NB Power’s plan to improve its understanding of the cost of serving non-domestic customers was fundamental to the expert evaluation of the proposal. Mr. Havumaki recommended waiting for the analysis to be completed before considering the proposal. Mr. Chapman concluded that the proposal appears to be in harmony with rate classification principles based, in part, on the utility’s plans to increase its understanding of the cost of serving non-domestic customers by monitoring them using AMI. Mr. Knecht’s opinion of the proposal was offered subject to additional load research sample data analysis.

[105] Ms. Thorne-Dykstra, a dairy farm operator who participated in the Board’s virtual public session, illustrated the importance of this additional data and analysis for affected customers. She outlined the challenges facing farmers and suggested that NB Power study the impact on the farming industry before implementing changes to the rates that farms pay. Mr. Porter confirmed in oral testimony that a bill impact analysis for each group of

Matter 529 – NB Power Rate Design

non-domestic customers using the forthcoming load data would be submitted to the Board when NB Power applies for approval of specific rate design changes.

[106] Further evidence is also required to determine whether the proposed limitations on charitable eligibility are reasonable. The utility indicated that it is not considering creating a separate charity class because there is no economic or cost of service rationale for doing so and broad social policy objectives should not be implemented by setting rates. Instead, NB Power proposes that poverty-relief charities would be eligible for Residential rates, while other small charities would be ineligible. The evidence in this proceeding does not establish a justification for this limitation that is distinguishable from the rationale underlying its decision not to create a separate charity class.

[107] While the evidence indicates that the number of potentially disqualified charities would be small regardless of whether these limitations are adjusted, the Board considers that the potential impact of such an adjustment, together with the need to understand the cost of service and customer impact better, are relevant and material to the evaluation of the reasonableness of the proposal.

[108] The Board, therefore, directs NB Power to conduct further analysis of its proposed consumption and demand eligibility thresholds using load research sample data, including evaluating the impacts of expanding Residential rate eligibility to all registered charities with small loads. The Board further directs NB Power to include the results of those studies in its application to modify Residential rate eligibility for these customers.

[109] NB Power indicated that the further analysis and refinement it intends to conduct will also involve other activities. Subject to the Directions in paragraph 108, the Board concludes that it is reasonable to complete this work as proposed because developing the utility's understanding of the cost to serve these non-domestic customers will improve its ability to assess the impact of the proposed eligibility thresholds on customers and evaluate whether similar customers are treated equally.

5.4.3 The proposal is reasonable for further analysis and refinement

[110] Based on the findings and conclusions in this Section 5.4, and subject to the Directions in paragraph 108, the Board concludes that NB Power's proposal to modify Residential rate eligibility requirements for small non-domestic customers is reasonable for the purpose of conducting further analysis and refinement. The Board is not yet satisfied that the proposal forms a reasonable basis for determining Residential rate eligibility for non-domestic customers. Section 5.5.3 of this Decision establishes the approximate timing for a proceeding to consider the final approval of new Residential rate eligibility requirements

Matter 529 – NB Power Rate Design

for non-domestic customers. For the reasons in Section 5.1 of this Decision regarding the conceptual nature of this request, the Board will consider the results of NB Power’s further analysis in that proceeding, and any other relevant and material new evidence submitted by NB Power, Board staff or other parties.

5.4.4 Extending eligibility to mid-sized charitable lodging loads is not reasonable

[111] Based on the evidence in this proceeding, the Board is not yet satisfied that the proposed expansion of Residential rate eligibility to mid-sized premises with charitable lodging is reasonable.

[112] The evidence does not disclose a reasonable basis for extending Residential rate class eligibility to these larger customers and not to other larger non-domestic customers or reconcile the apparent inconsistency between this proposal and NB Power’s proposed segmentation of distribution-connected customers based on differences in the cost to serve. The Board also has the same concerns about the restrictions on charitable qualification and the potential impact of forthcoming load data as discussed in Section 5.4.2 of this Decision.

[113] The Board, therefore, directs NB Power to conduct further analysis of its proposal using load research sample data, including an evaluation of the impacts of this proposal on eligible premises with lodging, ineligible premises with lodging, and other customers. The Board further directs NB Power to include the results of those studies in its application to expand Residential rate eligibility to these customers. Section 5.5.3 of this Decision establishes the approximate timing for that proceeding.

5.5 The proposed sequence and timing are approved, subject to Directions.

[114] The request considered in this Section offers a plan to finalize and implement the rate classification and eligibility changes proposed in Sections 5.2, 5.3, and 5.4 of this Decision and to coordinate the key activities.

[115] The proposed rate design changes are interdependent and depend on external factors, chiefly the mass rollout of NB Power’s advanced metering program and the Board’s upcoming review of the utility’s class cost allocation study.

[116] NB Power is seeking approval of its proposal for the sequence and approximate timing of the key activities required to implement the proposals, as indicated on the Roadmap.

Matter 529 – NB Power Rate Design

[117] For the reasons and subject to the Directions in this Section 5.5, the Board approves the proposed sequence and approximate timing for the rate design changes proposed in Sections 5.2, 5.3 and 5.4 of this Decision.

5.5.1 NB Power is ordered to implement new business classes and rates by April 1, 2027

[118] The Roadmap indicates that NB Power will apply for Board approval of its new business rate classes and rates in October of 2026 for implementation on April 1, 2027. The key activities involved are the completion of Board directed studies and other analysis and refinement, Board approval of final classes and associated rates, and the assignment of each customer to the appropriate class. These activities are dependent on the Board's upcoming review of the utility's class cost allocation study and the mass rollout of NB Power's advanced metering program.

[119] NB Power will file an application and evidence in connection with the Board's upcoming review of NB Power's class cost allocation methodology. The Roadmap indicates that NB Power anticipates that proceeding will be completed in the 2024-2025 fiscal year. A new cost allocation methodology and updated cost data are required to conduct the analysis and refinement necessary for NB Power to apply for detailed rate classes.

[120] NB Power expects to complete the mass deployment of AMI meters to its customers by the fall of 2025 unless supply and installation issues cause delays. The utility indicated that it should, ideally, collect one year of demand data after deployment to facilitate the transition of business customers to their new rate classes and apply new rates.

[121] Based on the anticipated timing of the Board's class cost allocation study review and the AMI rollout, the proposed timing for the new business classes described in the Roadmap is reasonable.

[122] Implementing the new business classes determines the timing for the proposals in Sections 5.3 and 5.4 of this Decision. GSII and non-domestic customers who become ineligible for Residential rates will transition to the new business classes when those classes are implemented. For this reason, the Board orders NB Power to implement the new business classes by April 1, 2027, the date indicated in the Roadmap. The Board expects NB Power to take all reasonable steps to manage the risk associated with completing the necessary antecedent steps and promptly inform the Board of any circumstances that may prevent the utility from complying with this Order, including any dependencies related to the AMI rollout.

5.5.2 The GSII class will be eliminated as directed in Section 5.3

[123] In Section 5.3 of this Decision, the Board directed NB Power to file a proposal as part of a general rate application to eliminate the GSII class no later than April 1, 2025, and, if appropriate, to propose bill protection for former GS II customers.

5.5.3 NB Power is directed to seek non-domestic customer eligibility approval in Phase 2a

[124] The proposals to modify Residential rate class eligibility for non-domestic customers depend on new load data from a currently deployed sample and AMI data availability to monitor the proposed demand thresholds. NB Power expects the sample to yield usable data by April 1, 2024, and intends to apply for final approval of its rate eligibility guidelines as part of its upcoming general rate application or in Phase 2a of the rate design proceedings in 2025-2026 before extending Residential rate access to newly eligible non-domestic customers on April 1, 2026. A second round of approvals and implementation is contemplated by April 1, 2027, to transition ineligible customers to the new business classes.

[125] Based on the anticipated timing of these activities and the implementation of new business classes, the proposal to apply for final approval of its rate eligibility guidelines in Phase 2a before extending Residential rate access to newly eligible non-domestic customers on April 1, 2026, is reasonable. The Board directs NB Power to file that application during Phase 2a, identified on the Roadmap.

5.5.4 The Board will not set a process for improving revenue-cost ratios in this proceeding

[126] Improving the revenue-cost ratios of the existing customer classes using differential rates, as described in Table 3.6e on page 47 of Exhibit NBP 1.03, is no longer a pre-condition for implementing these proposals. The Roadmap introduces the potential to implement targeted bill protection measures as an alternative way of respecting gradualism considerations for affected customers if differential rates fail to produce the desired improvement.

[127] While the Board is not setting rates in this proceeding, issues related to revenue-cost ratio improvement using differential rates are relevant to this proceeding because improving revenue-cost ratios for the existing classes will ease bill protection requirements for transitioning customers.

[128] NB Power uses internally developed guidelines that establish a plan to improve revenue-cost ratios over time using differential rates. These guidelines assign higher or lower-than-average rates to classes outside the Board approved range of reasonableness, with all classes within the range receiving an average rate increase adjusted to reflect revenue

Matter 529 – NB Power Rate Design

excesses or shortfalls from classes outside the range. Ms. Stevenson clarified in oral testimony that NB Power applies its guidelines within the context of the circumstances at the time and the potential impact on customers.

[129] All interveners asked the Board not to apply NB Power’s guidelines when setting differential rates. Ms. Rubin and Mr. Stoll considered NB Power’s guidelines too blunt, and all interveners sought a more flexible rate-setting approach that would allow for unequal treatment of rate classes within the range of reasonableness. Ms. Rubin asked the Board to defer consideration of differential rates until a new cost allocation methodology is adopted.

[130] Since NB Power is not seeking approval of these guidelines and the Board is not setting rates in this proceeding, the Board will not establish a process in this proceeding for improving revenue-cost ratios. Instead, the Board will consider revenue-cost ratios as part of its approval of rates in the context of all relevant factors, including NB Power’s rate design guidelines.

5.5.5 The proposed sequence and timing are approved, subject to Directions

[131] Subject to the Orders and Directions in this Decision, the proposed sequence and approximate timing are approved for the key activities required to implement the proposals considered in Sections 5.2, 5.3, and 5.4 of this Decision, as those activities are described in Table 3.6e on page 47 of Exhibit NBP 1.03 and the Roadmap.

5.6 The proposals for competitive products and services are approved

[132] The request considered in this Section proposes establishing price guidelines and a cost allocation framework to regulate competitive products and services using market-based considerations instead of cost-of-service considerations and allocating excess revenues to benefit other rate classes.

[133] As described in Section 2 of this Decision, rate classes with unreasonably high revenue-cost ratios may be paying too much for service. However, revenue-cost ratios may not be a useful indicator of inter-class equity where a utility provides competitive products or services.

[134] In Matter 357, the Board identified the high revenue-cost ratios of streetlight rental services, area lighting and water heating as a source of concern arising, on the one hand, from the perception that customers are paying unreasonably high rates for these services and, on the other hand, from suggestions that the Board should allow market forces to determine the prices and allocate excess revenues to benefit other rate classes.

Matter 529 – NB Power Rate Design

[135] NB Power seeks approval of proposals for products and services in markets with sufficient competitive characteristics to be regulated as a portfolio of Customer Energy Solutions. NB Power also proposes to include rental rates for water heaters, area lighting, and SureConnect backup power connectors in the portfolio of competitive products and services.

[136] The Board approves the request for the reasons in this Section 5.6.

5.6.1 The proposed portfolio approach is approved

[137] The Board approves the proposed portfolio approach because it addresses the equity concerns underlying the Board's Direction in Matter 357 by fostering market development while protecting customers and ratepayers.

[138] Under the proposal, optional products and services for which substitutes are available, that are forecasted to generate margins to be allocated to benefit ratepayers, and that align with NB Power's brand would be subject to specific price-setting guidelines using market-based considerations instead of allocated costs. Their net revenues would be segregated and allocated to ratepayers for cost-allocation purposes.

[139] The Board finds that the proposed selection criteria are appropriate for defining competitive products and services. The criteria promote fairness to consumers of these products and services by ensuring they can choose alternatives if the price is unsatisfactory. The Board also identified NB Power's water heater rental program as exhibiting those competitive characteristics in Matter 541 and endorsed the objective of generating margins on water heater rentals to benefit ratepayers.

[140] The Board must ensure that competitive offerings recover costs from participating customers and are not subsidized by non-participating ratepayers. While new products and services may not recover costs when they are introduced in the market, features of the proposal and the Board's continuing regulation of prices will provide sufficient protection.

[141] In addition to the selection criteria screening out offerings not forecast to generate net revenues, Mr. Porter and Mr. Hunter testified that the guidelines contemplate the Board setting prices for the individual products and services in the portfolio. While market pricing could also be achieved by the Board choosing to forbear from regulating these prices, the Board concludes that maintaining its regulatory authority over the composition of the CES portfolio and the prices of individual products and services in the portfolio ensures that prices are fair to consumers of these products without putting ratepayers at risk of subsidizing offerings that do not generate net revenues over time.

Matter 529 – NB Power Rate Design

- [142] Segregating the costs and revenues of these offerings for cost allocation purposes would also provide the Board with a collective view of their margins, which Mr. Porter noted would enable the Board to evaluate the business case supporting a new competitive offering from the perspective of the portfolio's overall net revenues instead of assessing each new offering in isolation. The Board considers the portfolio view of NB Power's competitive products and services to be a helpful tool that will foster the development of competitive products and services by reducing the likelihood of rejecting a product or service that is not expected to generate net revenues immediately but is forecast to benefit ratepayers in the longer term.
- [143] Finally, NB Power intends that, initially, the CES portfolio would be heavily weighted with mature products and services that generate significant and stable net revenues for the portfolio. Mr. Stoll supported the portfolio approach for this reason. He submitted that using mature products and services to offset the cost of developing new offerings is appropriate, provided that the portfolio maintains profitability to ensure ratepayers are not put at risk. The Board agrees and concludes that this weighting will allow new offerings to build net revenues over time while maintaining an overall net benefit to ratepayers at the portfolio level.
- [144] Based on this evidence, the Board concludes that the proposal addresses the equity concerns underlying the Board's Direction in Matter 357 by fostering market development while protecting customers and ratepayers. For these reasons, the Board approves the proposed portfolio approach.

5.6.2 The Board approves including the proposed products and services in the CES Portfolio

- [145] The Board approves the proposal to include water heating, area lighting and SureConnect offerings in the CES portfolio because these offerings fit the criteria. The evidence shows that all three products are optional with available market alternatives and currently generate or are forecast to generate net revenues. Customers can rent or purchase and choose among several water heater fuel sources and types, area lighting customers can select among a variety of available product and installation options, and the SureConnect backup power rental service is one of several alternatives available in the market. Water heater rental and area lighting are mature services that generate stable revenues of over \$23 million. SureConnect is a new offering that has yet to generate net revenues but is supported by a business case and is projected to grow over time.
- [146] The Board approves NB Power's proposal to continue using revenue-cost ratios to set rates for street lighting rental and unmetered services because these offerings do not meet the criteria for inclusion in the CES portfolio. The evidence shows that street lighting

Matter 529 – NB Power Rate Design

rental service is a natural monopoly, as approximately 85 percent of NB Power’s streetlights are installed on existing distribution infrastructure, and limited alternatives exist for customers because of specialized installation and maintenance requirements and the large number of streetlights customers may require. Unmetered service is part of the statutory monopoly under the Act.

[147] No party opposed the request, though the Public Intervener noted that the street light class exhibits a revenue-cost ratio far exceeding unity and that efforts to move rates in line with allocated costs will be needed. NBP proposed in its application to use its differential rate guidelines for street lighting rental services and unmetered service.

5.6.3 The proposed cost allocation study changes are approved

[148] The Board approves NB Power’s proposed class cost allocation study methodology changes to Street Lights and Unmetered rate classes and the format changes related to Customer Energy Solutions.

[149] As the Board directed, NB Power filed class cost allocation studies for the Street Light and Unmetered and Water Heater classes. NB Power’s proposed model for CES builds on changes recommended by Elenchus Research Associates Inc. to separate the Street Light and Unmetered class into three subclasses to align with NB Power’s distinct rate offerings for Street Lights, Area Lights, and Unmetered, then make other methodological changes that would assign costs to those subclasses according to causation. NB Power proposes to build on those changes to reflect its CES proposal by removing Customer Energy Solutions products and services from the list of customer rate classes, labelling the difference between the portfolio’s revenue and its embedded costs as “net revenue,” and showing the allocation of those net revenues to customer rate classes.

[150] Mr. Chernick found it reasonable to separate the Street Light class from the Unmetered class, and Mr. Knecht identified no significant concerns with the modifications and concluded they are reasonable. Based on Elenchus’s recommendation and the other expert evidence, the Board concludes that these changes are reasonable.

[151] NB Power proposes to apply average rate increases and differential guidelines unless supported by specific evidence for a cost-based increase. The Board will consider revenue-cost ratios as part of its approval of rates in the context of all relevant factors, including NB Power’s rate design guidelines.

6 Specific rate design issues to be considered in Phase 2

[152] The requests considered in this Section seek to identify rate design issues to be resolved in the next phase of this regulatory process.

[153] New technology and environmental concerns are driving changes in customer behaviour that reduce NB Power's electricity sales revenue from some customers without a proportionate decrease in the utility's cost to serve those customers. This may, in turn, cause inequity within or between rate classes. NB Power identifies several potential sources of this inequity in the existing rate structure and asks the Board to examine them in Phase 2. The utility also suggests ways to resolve some of this inequity and to stave off its revenue losses with strategic rate designs.

[154] In this Section 6, the Board approves a calculation methodology for NB Power's proposed Net Zero Rate and identifies the proposed rate, along with the following other issues, for resolution in Phase 2 because doing so may result in a rate design methodology that reflects the Board's rate design goals:

- a. an optional Net Zero Rate offering,
- b. public and fleet EV charging,
- c. the existing net metering program,
- d. EV charging by Residential and General Service customers,
- e. large-scale self-generation, and
- f. a streamlined approval process for special purpose rates for rate design learning.

The Board gives NB Power specific directions for filing supporting evidence in Phase 2a on each issue.

6.1 The proposed Net Zero Rate calculation methodology is approved

[155] Some NB Power customers are considering their options for minimizing the environmental impact of their energy consumption. Installing self-generation is one potential solution, but it reduces NB Power's electricity sales revenue and is not a viable option for all customers.

[156] NB Power proposes introducing a Net Zero Rate as a subscription service that would offer customers the option to purchase 100 percent of their energy from non-emitting energy

Matter 529 – NB Power Rate Design

sources by paying a premium above the customer's standard rate. The premium would be applied to the share of the customer's consumption deemed not covered by the aggregate non-emitting resources in the electrical system. For example, if the electrical system were 75 percent non-emitting, the applicable percentage would be 25 percent.

[157] NBP seeks approval of its proposed methodology for calculating rates for a Net Zero Rate offering. The utility expects to apply for approval of a specific Net Zero Rate during Phase 2a of the rate design proceedings, currently anticipated in the 2024-2025 fiscal year.

[158] For the reasons in this Section 6.1, the Board approves the proposed methodology subject to the further consideration of any adverse impact on non-participating ratepayers and, subject to the Direction in paragraph 174, will consider NB Power's application for approval of a Net Zero Rate in Phase 2.

6.1.1 The proposed offering may improve the existing rate design

[159] NB Power asserted that it requires the Board to approve its proposed rate calculation methodology before the offering is fully developed to capture existing market demand before potential customers move on to alternative net zero solutions that reduce NB Power's revenue, such as installing their own renewable generation. The evidence supports this assertion.

[160] NB Power submitted evidence indicating that its customers are interested in achieving their environmental goals using clean, local, renewable non-emitting energy and that the proposed offering may satisfy that demand for customers for whom installing their own generation is not a realistic or complete solution.

[161] The Clean Energy Rate Strategy and Recommendations Report authored by Now or Never concluded that early adopters would seek their own solutions if NB Power does not offer a clean energy option to them. Mr. Coady testified that an approved rate calculation methodology, combined with a supply agreement, would allow the utility to engage potential customers, particularly anchor customers, and mitigate the risk of losing their attention due to continued regulatory uncertainty.

[162] NB Power engaged Christensen Associates to assess the proposed program design. Based on NB Power's market research and preliminary cost analytics, they found that the offering is appropriately designed and geared to satisfy the customer preference for 100 percent non-emitting electricity supply at a price within the range that customers are willing to pay. They also found that the offering aligns well with contemporary industry rate design practice.

Matter 529 – NB Power Rate Design

[163] Based on this evidence, the Board finds that establishing a rate calculation methodology at this time will better enable the utility to develop a Net Zero Rate offering successfully.

[164] The Board is satisfied that a rate design issue exists: whether an optional clean energy rate would result in a rate design that more equitably protects ratepayers, is more adaptable to emerging customer needs, and preserves NB Power’s electricity sales revenue. The Board concludes that resolving this issue in Phase 2 may result in a rate design that advances the Board’s rate design goals.

6.1.2 The rate calculation methodology is approved

[165] NB Power’s proposed rate premium is based on its forward-looking analysis of the costs associated with a third-party wind supply agreement. In support of its proposal, NB Power filed a cost of service and rate design model developed using preliminary estimates of costs, together with an expert assessment of the methodology conducted by Christensen Associates.

[166] Christensen Associates preferred to base the rate on a benefit-cost framework to guide resource selection and the development of the pricing premium. Nonetheless, they concluded that NB Power’s approach of setting a pricing premium according to the costs of a defined resource is viable and appropriate in the context of cost-based regulation and that the initial analysis is carried out correctly. Christensen Associates offered several detailed adjustments to the cost of service and rate design model for NB Power’s consideration as the model continues to develop. NB Power indicated that the model components would be subject to adjustment as the program costs and customer uptake are better understood.

[167] The Public Intervener was the only party who opposed this request. He asked the Board to accept Mr. Knecht’s recommendation that the methodology be rejected because it is inconsistent with a cost-based rate or should await consideration in a future proceeding based on competitive factors.

[168] The Board disagrees with the Public Intervener’s approach. The Board accepts the testimony of Mr. Porter, who noted that NB Power’s proposal and Mr. Knecht’s preferred method are both ‘cost-based’ in that they are both calculated from costs, with the difference being whether the avoided cost is netted out for the benefit of all ratepayers. While Mr. Knecht recommended rejecting the proposed methodology on these grounds, he also conceded that the offering appears consistent with a competitive rate because it is based on a customer’s willingness to pay. The Board agrees with this characterization. As Mr. Furey noted in his submission, the Board heard evidence that the rate is optional

Matter 529 – NB Power Rate Design

and alternatives like renewable energy credits and self-generation are available in the market.

- [169] The Board must ensure that rates for a competitive offering recover the costs associated with the offering so that non-participating ratepayers are not subsidizing participants. NB Power's preliminary cost allocation and rate design model shows that the methodology is designed to ensure all costs are included in the pricing. The model also indicates that the price will include two components to protect non-participating ratepayers: a 10 percent margin to reduce the likelihood that costs exceed revenue and a minimum monthly charge to offset the cost of serving subscribers with minimal energy usage. The program design also contemplates socializing any avoided cost or system benefits from procured resources to put downward pressure on standard rates.
- [170] Based on this evidence and NB Power's stated intention to adjust its model to account for all associated costs in the offering price, the Board is satisfied that the rate calculation methodology does not present an undue risk to non-participating ratepayers.
- [171] Mr. Havumaki also raised concerns about the potential terms and conditions of the supply agreement and subscription contracts. He recommended that the Board require NB Power to update its proposal to include a clear plan to meet the program requirements while protecting non-participating ratepayers from cross-subsidization arising from disenrolling subscribers, particularly the sudden loss of a large subscriber.
- [172] The Board agrees with Mr. Havumaki that these agreements and the terms and conditions of the rate will be relevant and material to the question of whether the Net Zero Rate offering presents risks to non-participating ratepayers. The Board will consider further evidence of the associated costs and risks to non-participating ratepayers, including those arising from terms and conditions of the supply agreement and subscription contracts, in evaluating the proposed Net Zero Rate. The Board is satisfied that reviewing the agreements in its evaluation of the proposed rate will be sufficient for this purpose because they will be made conditional on the Board's approval of the rate. The Board will not require NB Power to file an updated proposal, as Mr. Havumaki recommends.
- [173] The Board, therefore, approves NB Power's proposed methodology for calculating rates for a Net Zero Rate offering, subject to further consideration by the Board of any adverse effects on non-subscribing customers.
- [174] The Board directs NB Power to file the supply agreement(s) for non-emitting energy, anchor customer agreement(s), and the subscription agreement the utility proposes to enter into in connection with this offering, and the other terms and conditions of the

tariff, with its application for final approval of a Net Zero Rate to be filed during Phase 2a of the regulatory proceedings identified on the Roadmap.

6.2 Public and fleet EV charging will be considered in Phase 2

- [175] Public and fleet electric vehicle (EV) charging station operators pay electricity rates that include charges based on the customer’s maximum demand, regardless of how frequently the charging station is used.
- [176] NB Power asserts that third-party development of public and fleet charging stations is somewhat impeded by upfront and ongoing costs that are high compared to usage, particularly in the early years of a station’s operation, and that demand charges for electricity exacerbate this situation.
- [177] NB Power is asking the Board to require the issue of public EV charging and fleet EV charging to be addressed for resolution in Phase 2 with mitigation of unnecessary or unjustified barriers in rate design as an objective.
- [178] For the reasons and subject to the Directions in this Section 6.2, the Board requires these issues to be addressed for resolution in Phase 2.
- [179] The Board heard evidence suggesting that utilities in other jurisdictions face similar issues. The 2020 Regulatory Assistance Project publication titled *Electric Cost Allocation for a New Era: A Manual*, indicates that public and fleet charging accounts present rate design challenges at this stage of EV adoption arising from the tension between the unique cost drivers for EV charging and the public policy benefits of supporting EV growth.
- [180] Supporting EV growth in the province to position NB Power to capture the benefits of new electricity sales is also consistent with NB Power’s strategic objectives.
- [181] No party opposed NB Power’s request to identify this issue for resolution in Phase 2. However, Synapse recommended that the Board require NB Power to demonstrate that any special rates for public or fleet charging station customers will not result in undue cost-shifting to ratepayers, weighing that concern against any countervailing policy objectives related to EV development. The Board accepts this recommendation as a reflection of the same “tension” between cost-based rate design considerations and policy or strategy-based considerations outlined in the Regulatory Assistance Project publication.
- [182] The Board is satisfied that a rate design issue exists: whether electricity rates for public and fleet charging stations should be set using strategic considerations that supersede

Matter 529 – NB Power Rate Design

traditional cost-based rate design considerations. The Board concludes that resolving this issue in Phase 2 may result in a rate design methodology that is more equitable and adaptable and will add certainty for stakeholders as they consider making investments in EV infrastructure.

[183] Therefore, the Board directs NB Power to address rate design issues relating to public and fleet EV charging in Phase 2. To facilitate the meaningful evaluation of these issues in the context of the Board’s rate design goals, the Board directs NB Power to file, as part of its Phase 2a evidence:

- a. an evaluation of any material barriers to third-party development of EV stations in NB Power’s eCharge Network and other public EV stations;
- b. any proposed rate design and policy changes to address these issues; and
- c. any other relevant supporting or explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board’s rate design goals.

[184] The Board will not require NB Power to conduct a cost-of-service analysis comparing different EV charging use cases at this time, as Synapse recommends because not every EV charging-related rate design is based on the same rate design considerations.

[185] The Board will not identify the mitigation of unnecessary or unjustified barriers to rate design or other specific objectives at this time. The evidence on the record is insufficient to support a finding that “unnecessary or unjustified barriers in rate design” exist, and the resolution may involve identifying an appropriate balance among competing rate design considerations.

[186] The Board notes that the Roadmap contemplates a technical stakeholder conference on Phase 2 issues in the fall of 2023.

6.3 Small-customer EV charging and large-scale self-generation will be considered in Phase 2

[187] NB Power identified two circumstances in which the current rate structure may worsen inequity within or between rate classes or cause a failure for the utility to recover its costs: one related to Residential and small General Service customers and the other related to large customers.

[188] Residential and small General Service (GS) customers currently pay two-part (customer service and energy) rates that do not explicitly recover demand-related costs. Within

Matter 529 – NB Power Rate Design

those classes, customers whose demand is high and energy consumption is low pay less than their share of the utility's cost to serve them, and other members of the same class subsidize the difference. Customers who engage in behind-the-meter EV charging increase their demand without a proportionate increase in energy consumption, resulting in those customers paying a lower proportion of the utility's cost to serve them and requiring other class members to pay even more. NB Power is concerned that growing EV use among Residential and small GS customers could amplify this issue to an intolerable extent.

- [189] Large NB Power customers who develop large generation projects can cause significant and sudden reductions in the utility's energy sales and revenue that cannot immediately be recovered from other ratepayers. The utility contends that the absence of ratepayer protection in the rate structure from sudden lost electricity sales is inconsistent with the Board's rate design objectives for an equitable rate design methodology that provides appropriate price signals for long-term investments.
- [190] NB Power seeks the Board's direction to require these issues to be addressed for resolution in Phase 2.
- [191] For the reasons and subject to the Directions in this Section 6.3, the Board requires these issues to be addressed for resolution in Phase 2.
- [192] No party objected to NB Power's request. However, Synapse expressed the view that it is impossible to have a meaningful conversation about cost-shifting associated with any variety of EV charging without data showing that cost-shifting is or will soon be a material concern. The Board agrees that the quantification of cost-shifting is relevant to evaluating inequity.
- [193] The Board is satisfied that a rate design issue exists, whether the growth of EV charging among Residential and GS customers or the increasing potential for large-scale self-generation requires rate design changes to achieve cost-based rate design objectives. The Board concludes that evaluating these issues in Phase 2 may result in a more equitable rate design methodology that is adaptable to emerging technologies. It will add certainty for stakeholders considering investing in EV and self-generation infrastructure.
- [194] Therefore, the Board directs NB Power to address rate design issues relating to Residential and GS EV charging and large-scale self-generation in Phase 2. To facilitate the meaningful evaluation of these issues in the context of the Board's rate design goals, the Board directs NB Power to file, as part of its Phase 2a evidence, any proposed rate design and policy changes to address these issues and any other relevant supporting or

explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board’s rate design goals.

6.4 The net metering program will be reviewed in Phase 2

- [195] A customer who installs net metering generation uses less metered electricity, causing a net loss of revenue for the utility because it does not recover its short-term fixed costs. This net loss must be recovered from ratepayers who are not program participants.
- [196] The stated objectives of NB Power’s effort to modernize its net metering program include reducing inequitable cost-shifting to non-participating ratepayers and developing a rate design adaptable to increasing quantities of a broader range of distributed energy resources (DERs).
- [197] NB Power seeks the Board’s direction to require these issues to be addressed for resolution in Phase 2.
- [198] For the reasons and subject to the Directions in this Section 6.4, the Board requires a review of the net metering program to be conducted in Phase 2.
- [199] The utility supported its request with an estimate of current and future cost-shifting and expert evidence in the form of two reports authored by Christensen Associates that introduced several alternative rate designs to support DERs.
- [200] A founding premise of NB Power’s request is that its inability to recover short-term fixed costs from net metering customers is an “inherent flaw” of the program that causes or will cause an inequitable level of cost-shifting onto non-participants.
- [201] The Board heard expert evidence that challenged this proposition.
- [202] Mr. Havumaki and Mr. Knecht did not dispute that the net metering program fails to fully recover the utility’s short-term system costs. Still, they both raised concerns that the utility may not be considering all avoided costs or benefits of renewable distributed resources. Mr. Havumaki recommended conducting a value-of-solar analysis to quantify the extent of cost-shifting using a more expansive view of potentially avoided utility system costs, and Mr. Knecht suggested that the Board require NB Power to include an evaluation of the social, environmental and resiliency benefits associated with net metering in its filing.
- [203] In response to this expert evidence, NB Power filed rebuttal evidence from Christensen Associates that questioned the need for a quantitative analysis of cost-shifting, “assuming

Matter 529 – NB Power Rate Design

that the Board accepts that the [net metering program] design is flawed due to the inherent utility net revenue losses attendant in a DER customer’s reduction in net energy consumption.” Christensen Associates also noted that utilities could close their programs to additional participants to limit their financial exposure to these losses.

[204] Based on the expert evidence of Mr. Havumaki and Mr. Knecht, the Board does not accept that the net metering program design is inherently flawed or that any amount of cost-shifting to non-participants is necessarily inequitable. The Board agrees with Mr. Havumaki’s statement in oral testimony that the threshold for tolerable cost-shifting is a determination for the Board to make.

[205] The public comment opportunity revealed a desire among stakeholders for an equitable adaptable, certain, and predictable rate design to support distributed generation. The Board heard from solar industry stakeholders who expressed support for rate design that accelerates the deployment of solar, storage, and EV charging infrastructure, including a revitalized net metering program. They also emphasized the extent to which their businesses depend on clear and predictable processes to minimize market uncertainty and their eagerness to participate in NB Power’s upcoming consultation process. Energy Storage Canada sought stronger and clearer signals for the adoption and operation of behind-the-meter energy storage technologies, while Ms. Thorne-Dykstra, a New Brunswick dairy farmer, suggested in the Board’s virtual public session that incentive pricing for distributed generation and protections for participating customers could encourage farmers to invest in generation infrastructure.

[206] Based on this evidence and the comments from the public, the Board is satisfied that rate design issues exist regarding the net metering program: whether the program causes inequitable cost-shifting or needs to be more adaptable to new distributed energy resources. The Board concludes that evaluating these issues in Phase 2 may result in a rate structure that is more equitable and adaptable to emerging technologies and will add more certainty for stakeholders as they consider making investments in DERs.

[207] No party opposed NB Power’s request. Mr. Knecht agreed with NB Power that reviewing net metering policies is common and necessary.

[208] Christensen Associates concluded that if the Board requires a quantitative analysis, a range of avoided cost estimation techniques should be considered, from a financial analysis to a value-of-solar analysis, to understand the range of views of avoided costs.

[209] The Board will, therefore, require NB Power to conduct a quantitative analysis of cost-shifting to non-participants. The Board accepts the recommendation of Christensen

Matter 529 – NB Power Rate Design

Associates to consider a range of avoided cost estimation techniques in its review, including a value-of-solar analysis. The Board also accepts Mr. Knecht's recommendation to evaluate the social, environmental and resiliency benefits associated with the net metering program. The Board will not close the program to new participants at this time.

[210] The Board does not accept Mr. Havumaki's recommendation to require NB Power to demonstrate the existence of material cost-shifting before granting the utility's request because Mr. Havumaki acknowledged that NB Power's net loss of revenue will grow as net metering installations increase, indicating that any attendant inequity would become material.

[211] The Board, therefore, directs NB Power to identify the issue of a net metering program review for resolution in Phase 2. To facilitate the meaningful evaluation of this issue in the context of the Board's rate design goals, the Board directs NB Power to file, as part of its Phase 2a evidence,

- a. a quantitative analysis of cost shifting associated with NB Power's existing net metering program using a range of avoided cost estimation approaches, including an estimation based on a value-of-solar analysis;
- b. an evaluation of the social, environmental and resiliency benefits associated with net metering;
- c. any proposed rate design and policy changes to address these issues; and
- d. any other relevant supporting or explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board's rate design goals.

[212] NB Power requests that the Board identify the following objectives and considerations as applicable in the development and implementation of a program to modernize net metering:

Objectives

- Equity (mitigation of existing cross subsidization)
- Adaptability (making rates applicable to different situations and changes)
- Providing appropriate price signals for long-term investments
- Reflect customer perspectives (participants and non-participants)
- Avoid creating barriers to GHG reduction opportunities

Considerations

- Shareholder and NB Power GHG emissions strategies
- The impacts of the transition from the current state to the future state
- Policy for participants in the current net metering program
- Perspective of non-participants (e.g., ~20 per cent agree with subsidizing, ~60 per cent disagree)
- Financial wherewithal of participants compared to that of non-participants
- Experiences in other jurisdictions

[213] The Board considers that the identified objectives and considerations are consistent with the Board's rate design goals and regulatory rate design considerations. The Board expects that stakeholders and participants in the Board's review may make NB Power aware of other objectives and considerations as those processes proceed.

6.5 The Board will consider an approval process for a regulatory sandbox

[214] NB Power intends to use demonstration projects, pilots, and soft launches to understand the implications of potential rate design solutions in a test environment, some of which may require the Board's approval of special-purpose rates. For example, the utility may wish to bill a limited number of volunteer customers using a new rate design and rates for the duration of a study.

[215] The Board's typical rate-setting procedure requires the utility, stakeholders, and the Board to expend extensive time and effort, which may not be appropriate for rate designs and rates with limited applicability.

[216] NB Power is seeking an order requiring the utility to submit a detailed proposal in Phase 2 for a process by which to seek approval for special purpose rate designs and rates for these learning initiatives.

[217] For the reasons and subject to the Directions in this Section 6.5, the Board requires NB Power to submit a detailed proposal, as soon as practicable, for a simplified approval process for a regulatory sandbox.

[218] The interveners shared a favourable view of a simplified approval process for rate design learning initiatives, and no intervener opposed NB Power's request. Ms. Rubin and the Public Intervener submitted that the process should strike a reasonable and flexible balance between efficiency and stakeholder engagement, and Mr. Stoll supported a

Matter 529 – NB Power Rate Design

transparent process that requires NB Power to report its test results to the Board and ensures that projects are funded without risk to non-participating ratepayers.

- [219] The Board agrees with these submissions and notes that NB Power’s initial concept for a sandbox procedure includes features indicating that the utility intends to address these concerns in its detailed proposal.
- [220] Mr. Furey submitted that NB Power intends to propose a streamlined approval process that would balance the desire for regulatory efficiency and the appropriate level of stakeholder engagement. He referred to Mr. Coady’s testimony indicating that NB Power may use a flexible approach to achieve the proper balance for each pilot project.
- [221] Other NB Power testimony clarified how NB Power intends to address Mr. Stoll’s concerns in its detailed application. Mr. Porter expects that the Board will review the proposal to evaluate the trade-off between transparency and efficiency and testified that NB Power would propose an approval process in which each application is filed publicly and supported by the utility’s rationale for testing the specific rate design. He considered it reasonable for NB Power to report the pilot test results to the Board. Mr. Coady and Mr. Porter also explained that funding for each project would be clear in advance and would not depend on unbudgeted spending.
- [222] The Board concludes that an expedited approval process for rate design learning initiatives would enable and accelerate the achievement of the Board’s rate design goals. The Board, therefore, directs NB Power to file a detailed proposal for a process by which NB Power can seek approval for special-purpose rate designs and rates for a demonstration project, pilot, or soft launch, as required, to undertake rate design learning.
- [223] The Board directs NB Power to demonstrate that its proposal establishes an appropriate balance between the need for efficiency and predictability and the need for transparency, reporting, and stakeholder engagement.
- [224] Mr. Porter indicated in oral testimony that NB Power is eager to have the ability to apply for special-purpose rate designs using an expedited regulatory approval process. The Board agrees with Ms. Rubin’s submission that NB Power should be encouraged to bring forward any innovative proposals to the Board where it would be timely before a sandbox process is approved.
- [225] The Board, therefore, directs NB Power to file the proposal as soon as it is practicable but no later than the time of filing its Phase 2a evidence. This Direction does not prohibit NB

Power from seeking earlier approval of any specific learning initiatives through an expedited process.

7 Sequence and timing for Phase 2 and future rate design activities

- [226] NB Power is seeking direction on the sequence and approximate timing for approval and implementation of the proposals to be considered in Phase 2 of this regulatory process and for other rate design activities that the utility may propose to undertake. NB Power’s proposed sequence and timing appear in the revised rate design Roadmap in Exhibit NBP 14.01.
- [227] Mr. Stoll raised concerns that the line item titled “rate modernization for residential and wholesale customers” in the original rate design roadmap in Figure 1 on page 90 of Exhibit NBP 1.03 does not appear in the revised Roadmap on pages 3 and 4 of Exhibit NBP 14.01.
- [228] In oral testimony, Mr. Porter indicated that the elements of this line item are subsumed within other listed activities and no longer expressly identified on the Roadmap. Mr. Stoll asked the Board to direct NB Power to file an updated roadmap that identifies when the activities related to rate modernization for wholesale customers may occur.
- [229] The Board directs NB Power to identify the line items on pages 3 and 4 of Exhibit NBP 14.01 within which the activities originally subsumed within “rate modernization for residential and wholesale customers” are situated in the revised Roadmap and the approximate timing of those activities.
- [230] Ms. Rubin asked the Board to direct NB Power to update the roadmap to include specific dates, as they become known, for the outcome of the class cost allocation study methodology review in Matter 554, the use of the updated cost allocation data in the context of the utility’s rate design activities, the potential implementation of seasonal rates, and the incorporation of new load data.
- [231] While the Board agrees with Ms. Rubin that these factors are relevant and material to the outcomes of the remaining phases of the rate design proceeding, the Board will not direct NB Power at this time to incorporate them into the Roadmap as those dates become known. The approximate timing for the updated cost allocation methodology and load research is represented on the Roadmap to the extent necessary to be used as a guide, and NB Power has confirmed its intention to use that data to develop its rate design proposals. Any additional adjustments should be made in the context of each proceeding that has consequences for the sequence and timing of future rate design activities and with the participation of the NB Power, parties, and the Board.

Matter 529 – NB Power Rate Design

- [232] Concerning seasonal rates, the Public Intervener asked the Board to require NB Power to file a proposal to implement seasonal rates in 2025-2026. He relied on Mr. Knecht's opinion that seasonal costing and seasonal rates are the simplest way to reflect those differences in rate design. Ms. Rubin shared the Public Intervener's view and submitted that NB Power is unlikely to propose seasonal rates without a Board direction.
- [233] NB Power does not dispute that seasonal cost allocation will influence revenue-cost ratios. As Section 5.1 of this Decision indicates, the Board is reviewing NB Power's class cost allocation methodology to address seasonal cost allocation and other methodological issues that may create inequity in the existing rate structure. The outcome of the Board's review of NB Power's class cost allocation study in Matter 554 is a necessary component of the Board's evaluation of a future proposed seasonal rate design.
- [234] It is too early to reasonably predict when cost data would be available to inform an application for seasonal rates and how much time NB Power would require to explore options and develop the programs and systems to implement a seasonal rate design. For these reasons, the Board will not direct NB Power to file a proposal for seasonal rates at this time. The Board concludes that a decision on whether to direct NB Power to file a proposal for seasonal rates may be an appropriate outcome of Matter 554.
- [235] The Board directs NB Power to file, on or before August 31, 2023, a further revised rate design roadmap reflecting the Orders and Directions in this Decision. Once filed, the Board will direct NB Power to use the revised rate design roadmap as a guide for the approval and implementation of the proposals to be considered in Phase 2 of this proceeding and for other rate design activities that the utility may propose to undertake.

8 Confirmation of compliance with foundational Directions

- [236] To enhance the value of the rate design process, the Board previously directed NB Power to continue its load research program and file the results and submit a proposal addressing the issue of under-represented customers in this rate design process.
- [237] NB Power's load research program aims to develop load profiles for each rate class for cost allocation and rate design. NB Power reported on its load research program re-invigoration efforts, including engaging expertise, installing meters and training staff. The utility also submitted opinion evidence on the program development and provided load research results.

Matter 529 – NB Power Rate Design

- [238] NB Power filed a proposal for under-represented customers in 2021, in which the utility suggested using various tools, including surveys, public forum presentations, and directed evidence on customer impacts.
- [239] The Board confirms that NB Power has complied with the Board’s previous Directions on these issues.

9 Other rate-setting issues

- [240] NB Power seeks Board approval to continue its current practices for adjusting its non-sufficient funds charge, late payment charge, and EV charging rates. Under current practices, the utility monitors the charges and adjusts them from time to time based on individual circumstances and management judgment instead of applying approved general rate increases. The Board approves these requests for the reasons below.
- [241] NB Power charges a non-sufficient funds charge of \$15.00 to offset costs associated with reversing customer payments and adjusting bank reconciliation records. NB Power surveys conducted in 2006 and 2020 indicate that the amount remains reasonable. Based on the long-standing history of this practice and the stability of the charge over time, the Board approves NB Power’s request.
- [242] The Board orders NB Power to continue using the current non-sufficient funds charge of \$15.00 until further order of the Board.
- [243] NB Power applies a late payment charge of 1.5 percent per month for accounts \$4.00 or more in arrears, with a minimum charge of \$0.50, to offset costs associated with collecting outstanding account balances. Based on NB Power’s jurisdictional comparison showing similar charges by other Canadian electric utilities as of November 2020, the Board approves NB Power’s request.
- [244] The Board orders NB Power to continue using the current rate for calculating Late Payment Charges, described on page 80 of Exhibit NBP 1.03, until further order of the Board.
- [245] NB Power’s eCharge Network includes authorized third-party Level 2 EV charging stations and NB Power-owned DC Fast Charger installations. It is appropriate for the Board to regulate the EV charging rates that apply to the eCharge Network using strategic considerations because the purpose of the eCharge Network is to enable EV adoption in the province, which, in turn, will contribute to future increased electricity sales. The cost implications of this rate-setting approach are minimal because of the low level of EV

Matter 529 – NB Power Rate Design

penetration in New Brunswick. This may change as demand for EV charging grows and a competitive market develops.

- [246] Synapse offered the opinion in their report that any cost-shifting concerns must be weighed against policy objectives. They recommended that the Board approve NB Power's request and direct the utility to evaluate the ratio of NB Power's revenues earned from eCharge Network stations to the cost NB Power incurs to supply power to them. The Board will monitor demand growth, regional rate changes and any other factors that impact EV charging rates but will not direct NB Power to evaluate the revenue-cost ratio associated with the eCharge Network at this time.
- [247] Based on the strategic purpose of this offering, the Board approves NB Power's request. Until further order, the Board approves a rate-setting approach by which EV charging rates are set to be comparable to EV charging rates in the region. The Board orders NB Power to include in each general rate application, as a minimum filing requirement, a report on demand growth, regional rate changes and any other factors that impact EV charging rates.

10 Conclusion

- [248] This proceeding is the first phase of a three-phase regulated process to design a modern rate structure for NB Power that aligns with the Board's rate design goals. This Decision establishes a foundation for future rate design changes by reducing historical inequities in NB Power's rate structure, identifying other potential inequities and rate design solutions for resolution in future proceedings and establishing the sequence and approximate timing for these and other rate design activities.
- [249] The approvals, Orders and Directions in this Decision, reviewed below, will reduce inequities in NB Power's existing rate structure and will allow the Board to consider other rate design changes in future proceedings that may result in a rate design methodology that reflects the Board's rate design goals.

Section 5.2

- [250] Subject to the Directions below, the Board concludes that the proposal for reclassifying commercial and industrial customers is reasonable for the purpose of conducting further analysis and refinement.
- [251] NB Power is directed to do the following:

Matter 529 – NB Power Rate Design

- a. study, consider and model a single transmission-connected class and further segmentation of transmission-connected customers, including but not limited to segmentation of those transmission-connected customers with demand exceeding 25 MW; and
- b. complete this work before seeking the Board's approval of new classes and rates for commercial and industrial customers and to report the results to the Board as part of its application for approval of new classes and rates for commercial and industrial customers.

Section 5.3

[252] The Board approves the elimination of the GSII class by April 1, 2025. The Board directs NB Power to file a proposal as part of a general rate application to eliminate the GSII class no later than April 1, 2025, and, if appropriate, to propose bill protection for former GS II customers.

Section 5.4

[253] Subject to the Directions below, the Board concludes that NB Power's proposal to modify Residential rate eligibility requirements for non-domestic customers is reasonable for the purpose of conducting further analysis and refinement. The Board is not yet satisfied that the proposed expansion of Residential rate eligibility to mid-sized premises with charitable lodging is reasonable.

[254] NB Power is directed to do the following:

- a. conduct further analysis of its proposed consumption and demand eligibility thresholds for small non-domestic customers using load research sample data, including evaluating the impacts of expanding Residential rate eligibility to all registered charities with small loads, and include the results of those studies in its application to modify Residential rate eligibility for these customers; and
- b. conduct further analysis of its proposal to extend Residential rate eligibility to mid-sized premises with charitable lodging using load research sample data, including an evaluation of the impacts of this proposal on eligible premises with lodging, ineligible premises with lodging, and other customers, and include the results of those studies in its application to extend Residential rate eligibility to these customers.

Matter 529 – NB Power Rate Design

Section 5.5

- [255] NB Power is ordered to implement the new business classes by April 1, 2027.
- [256] The Board directs NB Power to file its application for final approval of its rate eligibility guidelines during Phase 2a, identified on the Roadmap.

Section 5.6

- [257] The Board approves NB Power’s proposal to regulate products and services in markets with sufficient competitive characteristics as a portfolio of Customer Energy Solutions.
- [258] The Board approves NB Power’s proposal to include rental rates for water heaters, area lighting, and SureConnect backup power connectors in the portfolio of competitive products and services and to continue using revenue-cost ratios to set rates for street lighting rental and unmetered services.
- [259] The Board approves NB Power’s proposed class cost allocation study methodology changes to Street Lights and Unmetered rate classes and the format changes related to Customer Energy Solutions.

Section 6.1

- [260] The Board approves NB Power’s proposed methodology for calculating rates for a Net Zero Rate offering, subject to the Direction below and further consideration by the Board of any adverse effects on non-subscribing customers.
- [261] The Board directs NB Power to file the supply agreement(s) for non-emitting energy, anchor customer agreement(s), and the subscription agreement the utility proposes to enter into in connection with this offering, and the other terms and conditions of the tariff, with its application for final approval of a Net Zero Rate to be filed during Phase 2a of the regulatory proceedings identified on the Roadmap.

Section 6.2

- [262] The Board directs NB Power to address rate design issues relating to public and fleet electric vehicle (EV) charging in Phase 2. The Board directs NB Power to file, as part of its Phase 2a evidence:
- a. an evaluation of any material barriers to third-party development of EV stations in NB Power’s eCharge Network and other public EV stations;

Matter 529 – NB Power Rate Design

- b. any proposed rate design and policy changes to address these issues; and
- c. any other relevant supporting or explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board’s rate design goals.

Section 6.3

[263] The Board directs NB Power to address rate design issues relating to Residential and GS EV charging and large-scale self-generation in Phase 2. The Board directs NB Power to file, as part of its Phase 2a evidence, any proposed rate design and policy changes to address these issues and any other relevant supporting or explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board’s rate design goals.

Section 6.4

[264] The Board directs NB Power to identify the issue of its net metering program for review in Phase 2. The Board directs NB Power to file, as part of its Phase 2a evidence,

- a. a quantitative analysis of cost shifting associated with NB Power’s existing net metering program using a range of avoided cost estimation approaches, including an estimation based on a value-of-solar analysis;
- b. an evaluation of the social, environmental and resiliency benefits associated with net metering;
- c. any proposed rate design and policy changes to address these issues; and
- d. any other relevant supporting or explanatory facts or information that would assist the Board in evaluating the issues in the context of the Board’s rate design goals.

Section 6.5

[265] The Board directs NB Power to do the following:

- a. file a detailed proposal for a process by which NB Power can seek approval for special-purpose rate designs and rates for a demonstration project, pilot, or soft launch, as required, to undertake rate design learning;
- b. demonstrate that its proposal establishes an appropriate balance between the need for efficiency and predictability and the need for transparency, reporting, and stakeholder engagement; and

Matter 529 – NB Power Rate Design

- c. file the proposal as soon as it is practicable but no later than the time of filing its Phase 2a evidence.

Section 7

[266] The Board directs NB Power to file, on or before August 31, 2023, a further revised rate design roadmap reflecting the Orders and Directions in this Decision.

Section 8

[267] The Board confirms that NB Power has complied with the Board’s previous Directions to continue its load research program and file the results and to submit a proposal addressing the issue of under-represented customers in this rate design process.

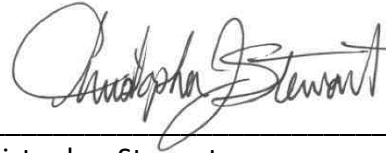
Section 9

[268] Until further order, the Board:

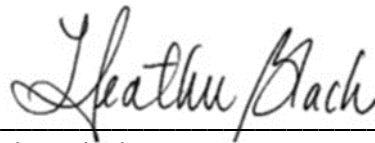
- a. orders NB Power to continue using the current non-sufficient funds charge of \$15.00 until further order of the Board;
- b. orders NB Power to continue using the current rate for calculating Late Payment Charges, described on page 80 of Exhibit NBP 1.03, until further order of the Board;
- c. approves a rate-setting approach by which EV charging rates are set to be comparable to EV charging rates in the region; and
- d. orders NB Power to include in each general rate application, as a minimum filing requirement, a report on demand growth, regional rate changes and any other factors that impact EV charging rates.

Matter 529 – NB Power Rate Design

Dated at Saint John, New Brunswick, this 27th day of October, 2023.

A handwritten signature in cursive script that reads "Christopher Stewart".

Christopher Stewart

A handwritten signature in cursive script that reads "Heather Black".

Heather Black

A handwritten signature in cursive script that reads "Stephanie Wilson".

Stephanie Wilson

Matter 529 – NB Power Rate Design

APPENDIX A

Participant	Counsel	Witnesses	Expert Witness Area of Expertise
NB Power	John Furey	<p>Brad Coady, Executive Director, Business Development & Strategic Planning</p> <p>George Porter, Director, Rates Modernization</p> <p>Blake Hunter, Director, Products and Services</p> <p>Veronique Stevenson, Rate Design Specialist</p> <p>Andrew Blair, Senior Consultant, Elenchus Research Associates</p> <p>Bruce R. Chapman, Vice President, Christensen Associates Energy Consulting, LLC</p> <p>Claude Godin, Senior Principal Consultant, DNV Energy Insights USA, Inc.</p> <p>Curt Puckett, Vice President, DNV Energy Insights USA, Inc.</p>	<p>The design and pricing of retail electricity products and the evaluation of costing and pricing methodologies</p> <p>Load research methodologies and implementation, meter data management, and energy analytics</p> <p>Load research methodologies and implementation, meter data management, and energy analytics</p>
J.D. Irving, Limited	Nancy Rubin, K.C.	<p>Patrick Bowman, Principal Consultant, Bowman Economic Consulting Inc.</p> <p>Melissa Davies, Consultant, MNYD Consulting Inc.</p>	Utility regulation, rates, rate design and cost of service
Public Intervener	Alain Chiasson	Robert Knecht, independent consultant and Senior Consultant, Industrial Economics, Incorporated	Rate design, regulatory economics, utilities regulation and ratemaking
Board Staff	Abigail Herrington	<p>Paul Chernick, President, Resource Insight Inc.</p> <p>Ben Havumaki, Senior Associate, Synapse Energy Economics, Inc.</p>	<p>Rate design and cost allocation</p> <p>Rate design, cost allocation and distribution generation compensation</p>