DECISION **2024 NSUARB 90**
M11455

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE ELECTRICITY ACT

- and -

IN THE MATTER OF AN APPLICATION from the Procurement Administrator under s. 13(1) of the *Green Choice Program Regulations* and s. 37 of the *Renewable Electricity Regulations* for approval of a Power Purchase Agreement for the purchase of renewable low-impact electricity from Independent Power Producers under the Green Choice Program

BEFORE: Stephen T. McGrath, K.C., Chair
Roland A. Deveau, K.C., Vice Chair
Richard J. Melanson, LL.B., Member

APPLICANT: **COHO CLIMATE ADVISORS**
Terence de Pentheny O'Kelly

INTERESTED PARTIES: **CANADIAN RENEWABLE ENERGY ASSOCIATION**
Jean Habel

NOVA SCOTIA POWER INCORPORATED
Mollie Morris, Counsel

SMALL BUSINESS ADVOCATE
E.A. Nelson Blackburn, K.C.
Melissa P. MacAdam, Counsel

CONSUMER ADVOCATE
David Roberts, Counsel
Michael Murphy, Counsel

NATURAL FORCES SERVICES INC.
Robert Apold

SWEB DEVELOPMENT LP
Stefan Karkulik

FINAL SUBMISSIONS:	May 15, 2024
DECISION DATE:	**May 28, 2024**
DECISION:	**Power Purchase Agreement approved with revisions as directed.**

TABLE OF CONTENTS

1.0 INTRODUCTION

[1] Section 4BA of the *Electricity Act*, S.N.S. 2004, c. 25, requires the Minister of Natural Resourses and Renewables (Minister) to "develop and maintain the Green Choice Program to procure renewable low-impact electricity and energy storage, provided by a supplier, to meet a participant's electricity load through a billing structure set out in the regulations". The *Green Choice Program Regulations*, N.S. Reg. 155/2023, describe this program in more detail. Under the program, eligible applicants may apply for a subscription in the Green Choice Program to be supplied with renewable low-impact electricity produced by independent power producers who are suppliers to the program.

[2] The regulations contemplate that these suppliers will be selected by a Procurement Administrator following a request for proposals (RFP) process. In December 2020, the government appointed CustomerFirst Renewables, now known as Coho Climate Advisors LLC (Coho), to serve as the Procurement Administrator (OIC 2020-350 and OIC 2023-353).

[3] Successful bidders in an RFP process for the Green Choice Program may be awarded a power purchase agreement (PPA) to supply Nova Scotia Power Incorporated with the renewable low-impact electricity for the program. Under provisions in the *Renewable Electricity Regulations*, N.S. Reg. 155/2010, that are incorporated into the *Green Choice Program Regulations*, the Procurement Administrator must prepare a standard form PPA. The form of the contract must be approved by the Board.

[4] Coho applied to the Board for the approval of a proposed PPA for the Green Choice Program on December 6, 2023. Once the draft was filed with the Board, a timeline was established for interested parties to provide comments, and for a reply by Coho. NS Power, the Consumer Advocate, and three industry participants provided comments

to the Board, suggesting revisions to the draft PPA. Coho, in its reply, commented on the suggestions, and in response to some, made changes. Coho provided a revised draft PPA with its Reply Comment.

[5] On February 20, 2024, Coho asked the Board to suspend its decision in this matter so the Procurement Administrator could consider possible changes to the proposed PPA aimed at better aligning with operator interconnection guidelines. The Board granted the request and the matter was placed in abeyance, pending further action by the Procurement Administrator.

[6] Before the matter was reactivated, the Government of Nova Scotia introduced Bill 404 in the Legislature on February 27, 2024, the *Energy Reform (2024) Act*. This legislation was passed and received royal assent on April 5, 2024 (S.N.S. 2024, c. 2). It will come into force upon proclamation, which is yet to occur.

[7] Among other things, the *Energy Reform (2024) Act* will create the *Energy and Regulatory Boards Act* and the *More Access to Energy Act*. The former will, in essence, split the mandates under which this Board operates and divide them amongst two different Boards (the Nova Scotia Energy Board and the Nova Scotia Regulatory and Appeals Board). The latter will establish a new corporation, the Nova Scotia Independent System Operator, which will assume certain obligations for the operation of the bulk electricity system in Nova Scotia, power system planning and the electricity market.

[8] In a letter received by the Board on April 19, 2024, Coho filed a revised proposed PPA [Exhibit C-2]. Coho advised that while it originally requested that the UARB pause consideration of the PPA to consider amendments aimed at better aligning with operator interconnection guidelines, in light of the introduction of the *Energy Reform*

(2024) Act, it considered and made more amendments to the PPA to align with the new legislation. Upon review of the revised PPA, the Board requested more information from Coho and established a timeline for other parties to provide comments on the revised draft. Coho provided the Board with the additional information it requested on May 3, 2024, and noted that it would be filing a further revised draft PPA on or before May 10, 2024. The revised draft was filed on May 13, 2024 [Exhibit C-3].

[9] After considering the evidence, the Board finds that, for the most part, the draft PPA as revised, represents a reasonable set of commercial terms for the supply of renewable energy. The draft provides a generally fair balance of the interests of the ratepayers of NS Power and the proponents of the projects. However, the Board concludes that there are areas where the draft PPA requires further revision or clarification. These include

- an amendment to s. 2.2(a) relating to delays in the delivery of studies, agreements or documents under the Generation Interconnection Procedure by the System Operator to the Seller;
- an amendment to s. 2.2(a) relating to the prohibition against further relief for a Force Majeure Event when an extension to execute and deliver the Generation Interconnection Agreement is granted;
- an amendment to s. 3.3 to provide a cap on fees paid by the Seller for NS Power's third-party vendor of meteorological forecasting services; and
- clarification about the Adjustment Period referenced in Exhibit "H".

[10] Coho is directed to address these items in a compliance filing.

[11] In the letter accompanying the application, Coho requested approval to make non-substantive changes to the form of the PPA which it considers necessary or advisable after Board approval. Understanding that such changes would be non-substantive only, the Board approves this request.

2.0 BACKGROUND

2.1 Board's Jurisdiction

[12] The *Green Choice Program Regulations* adopt s. 37 of the *Renewable Electricity Regulations*, requiring the Procurement Administrator, in consultation with NS Power, to prepare a standard form PPA for the Green Choice Program. Section 37(1) of the *Renewable Electricity Regulations* requires the standard form of power purchase agreement for this supply to be approved by the Board before the supply is procured.

[13] Under the *Electricity Act* and the regulations, the Board's role in this matter is limited to reviewing and approving, rejecting, or amending the proposed form of PPA. The Board has no jurisdiction to review the process used by the Procurement Administrator to solicit proposals, or to review the amount of power and energy to be acquired under the process. Consequently, the Board has limited its role to a review of the PPA, the role assigned to it under the *Act*.

2.2 Consultation Process by Procurement Administrator

[14] The Board understands that in developing the proposed PPA, the Procurement Administrator had numerous meetings and discussions with stakeholders, including the Nova Scotia Department of Natural Resources and Renewables (NRR),

other government agencies within the Province of Nova Scotia, NS Power, members of the proponent community and other organizations.

[15] The Procurement Administrator released the draft PPA for public comments and questions on August 24, 2023. Coho provided the public until September 21 to compile and return feedback. The Procurement Administrator then reviewed each comment and question provided, assessing the rationale for requested PPA changes. The Procurement Administrator said it sought to ensure revisions proposed to the draft PPA by stakeholders "maximized the value of renewable energy for customers and the overall electricity system, balancing the allocation of risk between the IPPs and [NS Power]."

[16] Coho's application is like one the Procurement Administrator filed with the Board in December 2021, for the approval of the PPA for a previous procurement under s. 4B of the *Electricity Act*, the so-called "Rate Base Procurement" (M10377). The Board approved the Rate Base Procurement PPA, with revisions, in a decision dated February 11, 2022 [2022 NSUARB 19].

[17] In this application, Coho noted that it made some changes in the proposed PPA compared to the approved form for the Rate Base Procurement. It said the key change it made was to include an energy rate price escalator, which it described in its application as follows:

> In the 2021 Agreement, a fixed price mechanism was employed on the basis that fixed pricing in power purchase agreements was, at that time, consistent with large scale renewable energy procurements in other jurisdictions and insulated ratepayers from rising energy prices. In the PPA, the PA has replaced fixed pricing with a price escalation mechanism whereby the energy rate is subject to annual price escalation by the Consumer Price Index (the "CPI") during the period immediately following the effective date until the earlier of (a) December 31, 2027 and (b) the commercial operation date (the "Adjustment Period"). The introduction of a price escalation mechanism is intended to reduce the risks of inflation and cost increases to IPPs during the development and construction period for the project.

> This also addresses, in part, feedback from interested parties. Interested parties requested indexation of the energy rate for the entire term of the PPA and noted that defining a maximum energy rate without indexation would not be workable for seller. The PA has considered this feedback; however, has limited escalation to the Adjustment Period on the basis that increasing the energy rate during the Adjustment Period has the benefit of mitigating cost pressures on the seller during the period in which the IPPs would be most susceptible to price escalation. [Emphasis added]
>
> [Exhibit C-1, p. 3]

[18] Coho included a redlined version of the proposed PPA, compared to the approved Rate Base Procurement PPA, in its application [Exhibit C-1(vi)].

2.3 Board's Approach

[19] The Board invited interested parties to provide comments on the proposed PPA by January 5, 2024, and reply comments by Coho by January 19, 2024 (later extended at Coho's request to January 22, 2024). The Board received comments from the following parties:

- the Consumer Advocate, who represents the interests of residential customers in matters under the *Public Utilities Act*;
- NS Power, the utility that would purchase the electricity generated from the projects ultimately approved by the Procurement Administrator;
- the Canadian Renewable Energy Association (CanREA), a non-profit industry association for wind energy, solar energy and energy storage solutions;
- Natural Forces, an independent power producer which develops, constructs, owns and operates renewable energy projects; and
- SWEB Development LP, an independent power producer which develops, constructs, owns and operates renewable energy projects.

[20] The Board also received a letter from the Small Business Advocate, who represents the interests of small business in matters under the *Public Utilities Act*, advising that he had reviewed the proposed PPA and had no comments.

[21] Coho, in its reply, commented on the suggestions made by the interested parties. In some cases, Coho accepted suggestions, but in others, it maintained that the provisions should not be amended, providing explanations for its position. Coho provided a revised draft PPA with its reply.

[22] The Board also received additional comments from Natural Resources and Coho after the proceeding was paused at Coho's request. These comments addressed questions the Board had about Natural Forces' previous submissions and the revised draft PPA that Coho filed with the Board after the pause.

[23] The Board reviewed the comments from the interested parties and Coho's responses. The Board's view is that the PPA must balance the interests of project proponents, NS Power and ratepayers. The risks must also be balanced. Proponents must be incented to put forward projects that will be successful and earn them a rate of return. NS Power must meet the legislated renewable electricity standards using sources that are reliable. Ratepayers want electricity at fair prices, and from renewable and reliable sources.

[24] The Board concludes that, for the most part, the commercial terms of the PPA, as revised, represent a fair balance of both the interests and risks of the parties, and ratepayers. The Board considers Coho made significant efforts to develop an agreement that meets the goals of the Green Choice Program and should enable the process to continue to a successful conclusion.

[25] The Board's comments in this decision are focused on areas it finds it should address based on the comments it received in this proceeding, or where the revised PPA requires amendment before the Board approves the contract. Where the Board has not directed revisions to the PPA, the remaining provisions are approved.

3.0 DISCUSSION

3.1 Section 1.1 – Definitions – Material Adverse Effect

[26] The phrase "material adverse effect" appears a dozen times in the proposed PPA. CanREA said given its importance, the phrase should be specifically defined in the agreement. CanREA proposed the following definition:

> Material Adverse Effect - means any change, event, occurrence, effect, state of facts or circumstance, that, individually or in the aggregate, is, or is reasonably likely to be, a material and adverse effect to the business, operations, assets, liabilities or condition (financial or otherwise) of NSPI or the Seller, in each case other than a change, event, occurrence, effect, state of facts or circumstance, to the extent resulting from one or more of the following: (i) any change in general economic, business, regulatory, political, financial, capital or credit market conditions in Canada; (ii) any change that generally affects any industry in which the Buyer or Seller [or any of their respective subsidiaries] operates; (iii) any change arising in connection with earthquakes, natural disasters, [epidemics and pandemics [or material worsening of any such epidemics and pandemics]], hostilities, acts of war, sabotage or terrorism, or military actions or any escalation or material worsening of any such hostilities, acts of war, sabotage, or terrorism or military actions existing as of the date hereof; (iv) any changes in GAAP/applicable accounting rules; except in the case of the foregoing clauses (i), (ii), (iii) and (iv) for any such change, event, occurrence, effect, state of facts or circumstance that materially and disproportionately affects NSPI or Seller as compared to other participants in the industry in which NSPI or Seller participates.

[27] Coho submitted the phrase is used in different contexts in the PPA and if a common definition was used in place of each reference to "material adverse effect", the definition would need to be so generic that it would defeat the purpose of defining it.

[28] The Procurement Administrator conceded that the definition proposed by CanREA is commonly used in other contexts but said the proposed definition "does not adapt well to all circumstances in which this term is used in the PPA." In its Reply

Comment, Coho listed several examples from the proposed PPA where it argued the definition of "material adverse effect" CanREA proposed would not fit the context. Generally, Coho argued the proposed definition was unsuited for these contexts because the adverse effect in issue was an effect on something other than the parties to the agreement or because one or more of the proposed exceptions in the definition were not appropriate.

3.1.1 Findings

[29] The Board finds that the phrase "material adverse effect" is used in different contexts in the PPA and does not agree that the definition for the phrase suggested by CanREA provides greater clarity to the agreement. Reading it into all instances where the term appears in the agreement could create problems when it does not precisely fit the circumstances. The Board finds leaving the phrase undefined in the PPA is preferable.

3.2 Section 1.1 – Definitions – Name Plate Capacity

[30] CanREA recommended there be additional clarity for solar power projects in the defined phrase "Name Plate Capacity." CanREA noted that, unlike for wind power projects, there is no similar standard for "Name Plate Capacity" for solar power projects.

[31] The Procurement Administrator recognized that an adjustment to the definition could add clarity for solar projects but noted that no solar projects were submitted in the Request for Information process, which it said was necessary for such projects to be awarded a contract in the Request for Proposals phase. Since no solar projects can be awarded a contract, the Procurement Administrator deemed it unnecessary to make any changes to the PPA that were specific to solar projects.

3.2.1 Findings

[32] The Board finds that if solar projects cannot be awarded a PPA for the Green Choice Program, amendments to the proposed PPA for those projects are unnecessary.

3.3 Section 1.6 – Preparation of Agreement

[33] Section 1.6 of the proposed PPA states:

> The Parties acknowledge and agree that any doubt or ambiguity in the meaning, application or enforceability of any term or provision of the Agreement, including provisions relating to the validity, interpretation or construction of the Agreement and the respective obligations, rights and remedies of the Parties under the Agreement, shall not be construed or interpreted against one Party or in favour of the other Party when interpreting such term or provision as a result of the preparation or other event of negotiation, drafting or execution of the Agreement.

[34] CanREA recommended that s. 1.6 of the PPA be deleted, noting the doctrine of *contra proferentum* ought not to be excluded and noting the PPA is largely a contract of adhesion, with Coho as the drafter, and is not a negotiated contract.

3.3.1 Findings

[35] The Board agrees with Coho's submissions in its Reply Comment. *Contra proferentum* is an interpretive approach that may be used where a contract is ambiguous and directs the reader to prefer the interpretation that does not favour the drafter. The doctrine generally applies where the non-drafting party had no meaningful opportunity to participate in the negotiation of the contract and where there is inequality of bargaining power.

[36] Under the Green Choice Program Procurement, interested parties were given the opportunity to provide feedback on the development of the terms of the PPA. Additionally, the proposed PPA must be approved by this Board, and parties were provided with the opportunity to participate in a process before an independent regulator

to settle the terms of the agreement. As the Procurement Administrator points out, s. 37(2) of the *Renewable Electricity Regulations* also allows the parties to agree to changes to the standard power purchase agreement approved by the Board.

[37] This provision was included in other PPAs approved by the Board and the Board finds it is appropriate to maintain it in this agreement.

3.4 Section 2.2 – Facility Interconnection

[38] The proposed PPA defines a Threshold Amount, which is the amount of Project Related Network Upgrades Costs that trigger certain decisions and rights under the agreement. Under s. 2.2(e), if the Interconnection System Impact Study estimates a cost of Network Upgrades exceeding the Threshold Amount, the Parties must try to address this by negotiating amendments to the Project or the PPA. If the Parties cannot agree on changes, the matter may be submitted to arbitration. If the arbitrator determines that costs will remain above the Threshold Amount, even after reasonable amendments, either party may terminate the PPA. In such a case, the agreement automatically terminates without costs or payments, except that if NS Power triggered the termination, the Seller may claim its out-of-pocket costs in developing the project between the date its Proposal was submitted and the completion of the Interconnection System Impact Study (to a maximum of $111,475). The Seller is also entitled to a return of its Performance Security.

3.4.1 Definition of Threshold Amount

[39] The Threshold Amount is defined in s. 1.1 of the PPA as $28.54/MWh multiplied by the Energy Bid (as corrected by the Procurement Administrator in its Reply

Comment). This is a change from the Threshold Amount in the PPA for the Rate Base Procurement, which used rates that varied in several zones in the province.

[40] CanREA asked for more detail about how the Threshold Amount was determined. It commented that removing zone-based thresholds in favor of a single $/MWh figure is based on the assumption of a mature grid with uniform integration costs, which needs to be tested.

[41] In its Reply Comment, Coho explained how the Threshold Amount was set for the PPA. The Program Administrator said that the Threshold Amount was derived from recent historical integration costs including costs from the recent Rate Base Procurement where the highest integration cost was about $12 million. Coho advised that the historical costs were adjusted upward for inflation and for assumed incremental costs of integrating variable resources to the grid and the maximum size of projects under the Green Choice Program.

[42] Coho submitted that the uniform Threshold Amount accounted for the highest integration costs identified in recent System Impact Studies and it is unlikely the costs identified in a completed System Impact Study would exceed that amount. Coho also submitted that the assumption of uniform integration costs is based on grid operator expectations that transmission differences between grid regions will be insignificant in the future.

3.4.1.1 Findings

[43] The Board finds that the Procurement Administrator's process for determining the Threshold Amount for the PPA appears reasonable and has no evidence before it suggesting the amount is not appropriate.

3.4.2 Actual Interconnection Costs

[44] Natural Forces submitted the PPA should provide Sellers with a termination right when actual interconnection costs are materially higher or technical requirements are materially more stringent than NS Power's initial estimates. Natural Forces recommended that s. 2.2(e) of the PPA provide Sellers with a termination right for 30 days after an arbitrator determines that the Project Related Network Upgrades Costs will remain materially in excess of the amount estimated in the Interconnection Feasibility Study, and/or that the technical requirements will remain materially more stringent than those determined in the Interconnection Feasibility Study.

[45] The Procurement Administrator, in its Reply Comment, amended the draft PPA to provide a mutual termination right if interconnection costs estimated in the Interconnection System Impact Study are higher than the Threshold Amount. Coho said the mutual termination right ensures that the Seller will not forfeit security in a situation where they are not at fault and no clear alternative exists to lowering costs.

[46] It was not clear to the Board that Coho addressed Natural Forces' concern about changes to technical requirements that are materially more stringent than NS Power's initial estimates. As a result, when the Board agreed to hold its decision in abeyance, at Coho's request, the Board directed Natural Forces to confirm whether its concerns about this specific point were addressed and, if not, to identify, as specifically as possible, the technical requirements it is concerned about, how these may turn out to be "materially different" as a result of a system impact study, and why these technical requirements do not manifest themselves in interconnection cost impacts that can be measured against the Threshold Amount.

[47] In a letter to the Board dated March 4, 2024, Natural Forces clarified that its concern was about changes to the published system operator's interconnection requirements from those in force at the time of the Feasibility Study. Natural Forces said these requirements "affect vendor selection, equipment sizing and design, and operational considerations *ergo* capital costs." It submitted these requirements do change from time to time and are outside of the Seller's control.

[48] As an example, Natural Forces referred to updates to Nova Scotia's Transmission System Interconnection Requirements relating to inertia response (which it did not consider to be industry standard or workable for wind power generators in Nova Scotia). In comments it filed to address the proposed changes to the PPA after the pause in proceedings, Natural Forces also referenced a new technical requirement posted by the Nova Scotia Power System Operator on May 8, 2024, about stability modeling for generators. Given the risk of material changes to technical requirements, and Natural Forces' submission that the Performance Security required under the PPA was multiple times higher than other jurisdictions, and inconsistent with the level of both opportunity presented, and risks faced by Sellers that are outside of their control", Natural Forces said the PPA should include a termination right for Sellers for changes to these technical requirements that are materially more stringent to those in force at the time of the Feasibility Study.

[49] In further responses to Natural Forces' submissions, Coho emphasized that it considered the intent of the Green Choice Program procurement is to provide low-cost clean power to ratepayers. It said Natural Forces requests contravene that notion as they

unnecessarily increase the potential for termination and shift considerable project risk to ratepayers.

[50] While Coho accepted that there was some risk that technical changes could occur, it felt this was mitigated by a January 16, 2024, directive issued to NS Power by the Minister of Natural Resources and Renewables (Ministerial Directive) and the *Energy Reform (2024) Act*. Coho said the Ministerial Directive requires NS Power to provide the necessary equipment to maintain the transmission system reliability, stability, and quality for interconnected wind generation facilities procured under the *Electricity Act*, although NS Power may set minimum technical requirements based on commercially available wind turbines. Coho submitted the Ministerial Directive should address the example about technical requirements related to inertia response cited by Natural Forces. Coho also said the *Energy Reform (2024) Act* confirms that the System Operator will be responsible for procuring grid stabilizing technologies, which is expected to minimize the possibility of technical requirements being imposed retroactively on Green Choice Program projects and will ensure that costs will not be borne by Proponents.

3.4.2.1 Findings

[51] In its application, the only change the Procurement Administrator proposed to s. 2.2(e) of the draft PPA from the version that was approved by the Board for the Rate Base Procurement was to adjust the out-of-pocket costs limit for inflation. The limit is considered in the next part of this decision. In response to Natural Forces' concerns, Coho revised this section of the proposed PPA to allow the Seller to terminate the agreement in addition to NS Power. As revised, the proposed PPA is more favourable to Sellers compared to the Rate Base Procurement PPA and, the Board finds, addresses Natural

Force's request for a termination right when interconnection costs exceed the Threshold Amount.

[52] Regarding Natural Forces' concern about technical requirements that are materially more stringent than NS Power's initial estimates, the issue is, ultimately, about the balancing of risks between the parties to the PPA and ratepayers. The Board recognizes that there is some risk that technical requirements for interconnection may change in a way that has an impact on a proponent's project costs. Providing a termination right to address this would shift this risk to NS Power and ratepayers. The risk faced by ratepayers is the potential that proposed renewable projects would not proceed, jeopardizing the achievement of renewables targets and exposing ratepayers to the potentially high cost of replacement energy from non-renewable sources and carbon taxes.

[53] Overall, the Board accepts Coho's reasoning for balancing the risks as it has in the proposed PPA. It would also appear that any risk of technical changes may be mitigated by the recent Ministerial Directive and legislative initiatives. The Board declines to direct that a termination right be added to the PPA to address technical changes, as proposed by Natural Forces.

3.4.3 Out-of-pocket Costs

[54] SWEB expressed concern about limiting a Seller's claim for out-of-pocket costs to $111,475. It considered this amount to be too low given the time it has been taking to complete Interconnection System Impact Studies. SWEB emphasized that the completion of Interconnection System Impact Studies is under NS Power's control and

project proponents would have no control over the time or the amount of interconnection costs.

[55] SWEB recognized that this limit was an inflation-adjusted value based on the limit in the Rate Base Procurement PPA, but it said this approach has "proven challenging and unreasonable considering the industry's experience with NSPI's interconnection process." SWEB also suggested this limit was not helpful. SWEB submitted that "[i]f the Province and NSPI would like to see the Green Choice Projects achieve commercial operation in time, proponents need to be able to invest money irrespective of any delay in the interconnection process." SWEB recommended the limit be significantly increased (by a factor of 10 or more).

[56] The Procurement Administrator said a 10-fold increase is not reasonable. Coho said if NS Power must compensate the Seller for this claim and the project is unable to move forward, ratepayers will unnecessarily bear this cost. It noted that the revised draft PPA reflects a mutual termination right if actual interconnection costs are higher than the Threshold Amount, which ensures that the Seller will not forfeit security in a situation where they are not at fault and no clear alternative exists to lowering costs.

3.4.3.1 Findings

[57] The Board appreciates that managing the development of a project in the face of uncertain interconnection study completion times and interconnection costs is challenging. While these matters may, to some extent, be out of the control of project proponents, ratepayers would bear the burden of the proposed increase in the right to recover development costs, if the project does not proceed due to high interconnection costs. Little evidence was presented to the Board to support the claim that the limit for the

recovery of these costs should be increased by ten times the amount allowed in the Rate Base Procurement PPA. In the absence of more compelling evidence warranting exposing ratepayers to that additional risk, the Board finds that the proposal to increase the amount from the limit in the approved PPA for the Rate Base Procurement for inflation is appropriate.

3.4.4 Extension for Execution and Delivery of Generator Interconnection Agreement

[58] Section 2.2(a) of the proposed PPA requires the Seller to execute and deliver the Generator Interconnection Agreement by the earlier of 374 Business Days after the Effective Date and the interconnection of the Facility to the System. Given delays seen during the Rate Base Procurement Request for Proposals, SWEB suggested adding specific text to this provision to extend this deadline where there are delays to the anticipated interconnection process caused by NS Power.

[59] The Procurement Administrator accepted this suggestion but modified the language SWEB proposed in a new version of s. 2.2(a) included with Coho's Reply Comment. The Procurement Administrator did not explain its reasons for modifying the language from SWEB's proposal. In some cases, the changes are due to drafting style, but there are three that are more substantive.

[60] The first modification is that Coho's language allowed an extension for delays associated with the delivery of the Interconnection System Impact Study, the Interconnection Facilities Study, or the Generator Interconnection Agreement, but excluded the following additional language proposed by SWEB: "or any other study, agreement or document, that is to be provided by the System Operator or NSPI as set out in, described or resulting from the Generator Interconnection Procedure."

[61] The second modification is that Coho limited the right to an extension for a delay to situations where "such delay did not occur due to, or was not attributable to, any acts or omissions of the Seller." In SWEB's proposed language, the limitation was proposed to apply only where "such delay did not exclusively occur due to any acts or omissions of Seller."

[62] Finally, Coho added language to clarify that where an extension under s. 2.2(a) occurs, the Seller is not entitled to claim a further extension or further relief under s. 11 (the force majeure provisions).

3.4.4.1 Findings

[63] Regarding the first modification, while it broadens the scope, the additional language proposed by SWEB does not appear unreasonable. Since the Procurement Administrator did not explain why it disregarded this language, the Board directs that it be added to the proposed revisions to s. 2.2(a).

[64] Regarding the second modification, the Board finds that the language provided by Coho provides a more appropriate balance for this extension.

[65] Regarding the third modification, the Board agrees that the proponent should not be able to claim a further extension under the force majeure provisions given the extension is now specifically addressed in s. 2.2(a). However, the Board is concerned that the restriction against "other relief" under s. 11 is too broad. The Board finds it is more appropriate to restrict the cross-reference to the force majeure provisions in the new language in s. 2.2(a) to only preclude relief in the form of additional extensions. The Procurement Administrator is directed to remove the text "or further relief" from the proposed provision.

3.5 Section 2.7 – Equipment Certification

[66] Section 2.7(a) requires the Seller to confirm that the Generating Technology has been Certified or has started the process of being Certified and will be Certified on or before the Scheduled Commercial Operation Date. CanREA objected to this requirement and requested that it be deleted.

[67] CanREA said this was a very unusual requirement. It noted its consultant, Power Advisory, has experience in Ontario, Saskatchewan, British Columbia, Newfoundland and Labrador, New York, Massachusetts, and Maine and has never seen this requirement in these regions. CanREA noted the provision was not included in two tidal PPA's in Nova Scotia and submitted continuing with this requirement, just because it was in the Rate Base Procurement PPA, was poor justification.

[68] CanREA also questioned the purpose served by this provision, commenting that generation risk already rested on the Seller under the PPA, not NS Power. It said the provision did not offer additional incentive to use quality and proven technology and noted that it is challenging to obtain certification from some manufacturers, which could reduce the technology choices available to Proponents and lead to higher costs for NS Power.

[69] Coho noted that although CanREA said equipment certification is not required in other jurisdictions, the 2021 Standard Electricity Supply Contract for Wind Power by Hydro-Quebec requires parties to include certification of a wind farm's wind turbines in Annex I. The Procurement Administrator added it is not uncommon for financiers to also require equipment certification in debt agreements with renewable project developers.

[70] The Procurement Administrator said the intention of the Green Choice Program procurement is to procure low-cost renewable electricity that will save

ratepayers money. It submitted that uncertified equipment may be less likely to perform as expected. Coho said the requirement for equipment certification protects ratepayers from disruptions or reduced service that could cause the system operator to switch to more expensive generating technologies.

3.5.1 Findings

[71] The Board disagrees with CanREA's suggestion that only the Seller is at risk if its generation equipment fails. This submission ignores the objective under the *Electricity Act* and its regulations to provide programs and measures to move the Province forward in its pursuit of a decarbonized electricity system. It assumes there will be ample renewable electricity resources to replace lost production from failed equipment and ignores the possibility that replacement energy would be more costly. Any higher cost for replacement energy would flow through to NS Power's ratepayers under its Fuel Adjustment Mechanism.

[72] The Board finds that the requirement for Equipment Certification mitigates against the risk and consequences of equipment failure for all parties and is a suitable balance under the PPA for the Green Choice Program. The Board finds s. 2.7 of the proposed PPA should remain in the PPA for the program.

3.6 Section 3.1 – Operation Covenants

[73] Section 3.1(b) of the PPA requires the Seller to own the Facility. CanREA noted that s. 3.1(a) allows the Seller to lease the land the Facility is on and submitted there is no additional risk to the ratepayers if the Seller leases the equipment, rather than owning it.

[74] The Procurement Administrator said it is common in renewable energy project development for a Seller to lease real property. However, it considered that the leasing of equipment exposes ratepayers to risk. Coho noted that if there is a failure to pay the lease, the equipment could be removed and returned to the lessor, exposing ratepayers to possible disruptions in service.

[75] While Coho noted that allowing the Facility to be leased would permit Sellers to explore alternative financing solutions, any alternative financing solution would need to be well understood by any counterparty to the PPA to justify deviating from a typical risk profile of a power purchase agreement financed through conventional financing structures. The Procurement Administrator suggested that a lack of transparency in leasing arrangements makes it difficult to quantify other risks associated with this structure. Further, Coho said that, unlike in a project financing, where the PPA governs the terms of any financing and contemplates a direct agreement between NS Power, the Seller and any project lender, NS Power would have no direct agreement with or visibility into the arrangements with the ultimate owner of the Facility if the equipment were leased under an equipment or capital lease structure.

3.6.1 Findings

[76] The Board agrees with the Procurement Administrator's assertion that the leasing of equipment poses different risks that may be difficult to quantify. These risks could result in disruptions if equipment is removed from the Facility, exposing ratepayers to the potentially high cost of replacement energy from non-renewable sources and carbon taxes. Sections 3.1(a) and (b) in the proposed PPA for the Green Choice Program are unchanged from the PPA approved by the Board for the Rate Base Procurement. The

Board concurs with Coho's comment that no compelling evidence was provided to deviate from what was previously approved. In balancing Seller flexibility, costs and risks, the Board concludes that the Seller should not be permitted to lease the Facility.

3.7 Section 3.3 – Reporting of Seller and Forecasting Facility Output

[77] Section 3.3 of the PPA requires NS Power to use a third-party vendor to provide meteorological forecasting services for wind energy projects supplying energy for the Green Choice Program. The service provider's monthly fee for this is passed along to the Seller along with an administrative fee from NS Power up to 19% of the monthly service fee. The monthly service fee in the proposed PPA has not been specified and a note to the draft indicates this value is to be added when the agreement is executed.

[78] CanREA said not disclosing the monthly service fee is problematic because the cost needs to be known for the purpose of financial modelling. As an alternative, since the Procurement Administrator represented that the fee is not expected to exceed $1,000, CanREA submitted that parties should be able to rely on this representation under the agreement.

[79] The Consumer Advocate submitted that requiring Sellers to reimburse NS Power for the cost of a third-party vendor to provide meteorological forecasting services introduces unnecessary material cost uncertainty and risk. The Consumer Advocate recommended that these costs be recovered by NS Power through its Fuel Adjustment Mechanism without the additional cost that a Seller would incur to account for uncertainty and risk.

[80] The Procurement Administrator reiterated that this monthly fee is expected to be less than $1,000, but it said the exact fee cannot be disclosed due to confidentiality

restrictions on disclosure and it could not set a maximum monthly fee that Proponents can expect to pay. Coho suggested the risk related to this uncertainty was mitigated by the fact that NS Power's forecasting service is a mature line of business, which is expected to have stable pricing moving forward, with increases aligned with other established service industries.

[81] The Procurement Administrator considered it was unlikely that recovery of costs through NS Power's Fuel Adjustment Mechanism would be possible, as this mechanism has been established only to calculate actual fuel costs, not costs associated with the meteorological forecasting.

3.7.1 Findings

[82] Although the Board considered this provision in its decision about the Rate Base Procurement PPA and accepted the confidential treatment of the forecasting service cost [2022 NSUARB 19, paras. 24-27], the question of a cap on this charge, which was raised in this proceeding, was not considered. The Board finds it is most appropriate for the monthly fee for the third-party vendor's forecasting service to be the lesser of the actual fee or a capped amount set at $1,000, to be adjusted each year for inflation based on the Consumer Price Index (as defined in s. 1.1 of the PPA). The current fee is known by NS Power. The Board finds it is not appropriate for the Seller to be presented with this uncertainty, which creates risk and likely translates into additional project costs for ratepayers, when it is expected to be less than $1000/month with stable increases going forward. The Board directs the Procurement Administrator to make this change to the proposed PPA.

3.8 Section 4.1 – Required Sale and Delivery of Energy

3.8.1 Climate Change Impacts on Energy Resource

[83] Section 4.1(d) of the PPA requires Net Output from the Facility to be at least 80% of the Energy Bid each year, failing which, the Seller must pay liquidated damages for the deficiency. Natural Forces submitted that Sellers cannot fully anticipate (or manage) the impacts of future climate change on renewable energy resource variability, and it was unreasonable to allocate to them the uncertainty and risk of changing weather patterns in the 2040's and 2050's. It recommended that if the Facility was designed and constructed to be capable of generating and delivering an average yearly Net Output not less than the Original Energy Bid and the Seller was using Commercially Reasonable Efforts to operate, maintain and rehabilitate the Facility to do so, then the Seller should not be subject to liquidated damages due to variability of the Energy Source, and the threshold for under-performance should be established based on the degree of availability of the Facility.

[84] The Procurement Administrator argued that the potential impacts to wind resource over a prolonged period have already been accounted for in the PPA through the Shortfall Energy threshold of 80%. Coho also said that flexibility in the PPA to restate the Energy Bid, in concert with studies positing future increases in wind resource and available predictive weather resource modeling, provided sufficient relief to Proponents.

[85] The Procurement Administrator also submitted that although climate change impact to wind resource is not certain, studies generally show an increase in available power in medium- to long-term future scenarios in North America (Russo, 2022).

3.8.1.1 Findings

[86] The Board finds that the proposed PPA already balances the risk of reduced Net Output (due to climate change or other reasons beyond the control of the Seller) and the obligation to deliver the committed energy. In the Board's view, Natural Forces' proposal would shift most of the climate change risk to ratepayers. The Board finds the balancing of risks in the proposed PPA to be appropriate.

3.8.2 Restatement of the Energy Bid

[87] As noted above, the proposed PPA gives Sellers the opportunity to restate the Energy Bid. Section 4.1(c) allows the Seller to restate the bid to no less than 90% and no more than 100% of the Original Energy Bid within 30 days of the first day of the Second Contract Year. Section 4.1(e) provides another right to restate the Original Energy Bid when a project is underperforming in the first five years.

[88] CanREA submitted that the ability to restate the Original Energy Bid under s. 4.1(c) should be symmetrical so that the Seller would be able to reduce or increase the Energy Bid by plus or minus 10%.

[89] The Procurement Administrator rejected this submission, noting that the upper limit for project size has been increased to accommodate availability of larger projects. Coho noted that upsizing can create grid transmission planning challenges for the system operator, but downsizing does not present these same challenges (although it may create additional costs for ratepayers if it causes the grid operator to deploy higher cost generators).

3.8.2.1 Findings

[90] As noted above, the ability to reduce the Energy Bid can provide some benefit to Sellers and in some instances reduce their exposure to liquidated damages when there are issues with the energy resource or other problems. While allowing the Energy Bid to increase would also benefit Sellers, it could also create grid transmission planning issues that should be avoided. The Board finds the current flexibility in the PPA around restating the Original Energy Bid is appropriate.

3.8.3 Liquidated Damages

[91] The amount of liquidated damages specified in s. 4.1(d) is equal to the Renewable Attribute Loss Rate times the Shortfall Energy plus an amount equal to the Shortfall Energy times the difference between Annual Average Marginal Cost Rate for that Contract Year and the Energy Rate (if the Annual Average Marginal Cost Rate for that Contract Year is greater than the Energy Rate). CanREA said this was punitive and should be removed or replaced with a genuine pre-estimate of NS Power's damages.

[92] The Procurement Administrator said that s. 4.1(d) is intended to compensate NS Power and ratepayers for the added cost of switching to alternative sources in the event that the Facility underperforms, which could cause real cost increases for ratepayers if NS Power switches to costlier fuels and is subject to a higher carbon tax.

[93] Coho also submitted that the calculation of liquidated damages in the PPA is reliant on the Annual Average Marginal Cost Rate, which depends on variables that may change over time, such as future PPA energy rates, fuel mix, and fuel rates. Given

this, the Procurement Administrator said it would not be prudent to replace the calculation of liquidated damages with an alternative estimate.

3.8.3.1 Findings

[94] The liquidated damages provision in s. 4.1(d) of the PPA compensates for the loss of the renewable attributes associated with the undelivered energy and a higher annual average marginal cost. The Board finds this to be reasonable, and not punitive, and accepts Coho's submissions for why it should not be replaced with an alternative estimate.

3.9 Section 4.2 – Acceptance of Energy

[95] Under s. 4.2(d) of the PPA (filed by Coho before the requested pause), a Seller whose Facility is available for dispatch, who has not selected the Congestion Management Alternative, but has selected Network Resource Interconnection Service, is entitled to payment for curtailments under the PPA, except when those curtailments were made under the Generator Interconnection Agreement (s. 4.2(c)), or a Facility Interruption or a Forced Outage (s. 4.2(d)). Natural Forces noted that s. 9.7.2 in the Generator Interconnection Agreement "allows for a broad array of curtailment scenarios potentially including when: total generation on the system is in excess of total system load (net of exports, storage, and distributed generation); and/or any technical system operating limits on instantaneous wind power generation."

[96] Natural Forces said that independent power producers are poorly positioned to manage the risk of foregone revenues due to curtailments caused by generation exceeding load or technical system operating limits on instantaneous wind power generation. It noted that NS Power's most recent integrated resource plan

forecasts an average curtailment of 1.9 TWh for 5.4 TWh of wind power generation in 2030 (the equivalent of one in every four units of electricity that could be produced). It also noted that the Province's Clean Power Plan references the use of offshore wind and hydrogen, which it said further increases curtailment uncertainty and risk.

[97] Natural Forces recommended that the PPA confirm Sellers will be compensated when curtailment occurs due to total generation being in excess of system load (net of exports, storage, and distributed generation) and/or any technical system limits on instantaneous wind power generation. It said not doing so would result in higher costs for wind projects under the Green Choice Program RFP and "untenable downside financial risks for proponents."

[98] Finally, with reference to Travis Lusney's evidence (Power Advisory LLC) on behalf of the NRR in the Board's ongoing proceeding about NS Power's interconnection processes (M10905), Natural Forces submitted the topic of managing curtailment risk for projects contracted through Provincial renewable procurements has been raised for consideration. Natural Forces urged the Board to consider the ongoing discussion of topics related to the importance of managing compensation in new ways from M10905 into account in this proceeding.

[99] The Procurement Administrator submitted that if the recommendations proposed by Natural Forces were adopted, this would result in the PPA superseding the terms of the Generator Interconnection Agreement in effect at the time of the execution of the PPA with respect to the availability of compensation for curtailment. Coho said it does not believe the PPA can require compensation for something that is contemplated

in the Generator Interconnection Agreement and expects that the risk of expected curtailment can be included in the Energy Rate bid in a Proposal.

[100] Coho went on to note that any prospective amendments to the Generator Interconnection Agreement in response to the Board's review of NS Power's Interconnection Process would not currently be captured by Section 4.2 of the PPA because that section only excludes curtailment contemplated in the existing Generator Interconnection Agreement. The Board notes that s. 4.2(d) of the proposed PPA refers to the "Generator Interconnection Agreement in effect as of the Effective Date."

[101] In response to system limitations, the Procurement Administrator said that automatic generation control requirements have been set forth to minimize technical system limits on instantaneous wind power generation.

[102] There were extensive revisions to s. 4.2 of the proposed PPA in the version of the agreement that Coho filed with the Board after the pause in this proceeding [Exhibit C-2]. These were made in response to the *Energy Reform (2024) Act*, which, when proclaimed in force, will amend the *Electricity Act* to add the following:

> 4E (1) In this Section,
>
> (a) "curtailment" means, based on instruction sent to a generation facility from the system operator, the decrease or cessation of the generation facility's generation output;
>
> (b) "system operator" means the IESO or Nova Scotia Power Incorporated.
>
> (2) This Section applies to a generation facility that has received, on or after March 1, 2024, a power-purchase agreement under a procurement initiated under Section 4B.
>
> (3) A generation facility may not be compensated for any curtailment until such curtailment exceeds five per cent of its total energy bid as defined within the generation facility's power-purchase agreement.
>
> (4) Where a generation facility's curtailment exceeds five per cent of its total energy bid, the generation facility shall be compensated for the curtailment by the purchaser of the generation facility's generation output at the rate set out in the power-purchase agreement unless

> (a) the generation facility was not generating electricity at the time the system operator instructed the facility to decrease or stop its generation output; or
>
> (b) the instruction to decrease or stop the generation facility's generation output was sent due to an unforeseeable emergency or force majeure event.
>
> (5) The system operator shall determine and define what constitutes an emergency or force majeure event for the purpose of clause (4)(b) and, where requested by a generation facility, shall provide that reasoning to the generation facility.
>
> (6) A dispute respecting a curtailment may be appealed to the Board.

[103] In Exhibit C-2, Coho proposed an approach to compensation before the coming into force of s. 4E of the *Electricity Act* that would be replaced by the compensation scheme set out in s. 4E when it comes into force. The Board sought more information from Coho in response to the proposal to use two different approaches for compensation for curtailment in the same agreement. In response, Coho noted that s. 4E supersedes the PPA and said its rationale for the two different approaches was that the existing PPA regime on curtailment would continue to apply until such time as the legislation came into force. However, Coho went on to note that it was comfortable adopting a uniform compensation arrangement for curtailment to provide certainty to Proponents.

3.9.1 Findings

[104] Upon the coming into force of s. 4E of the *Electricity Act*, compensation for curtailment will be governed by the legislation. It is quite possible that this provision will be effective before any of the Green Choice Program projects produce electricity. Given this, the Board finds it is reasonable to adopt the approach contemplated for by the legislation in the PPA rather than contemplate a possible transition in requirements under the PPA mid-term. Coho submitted a revised PPA with a provision to this effect [Exhibit C-3], which the Board accepts.

3.10 Section 5.1 – Energy Payment

[105] Section 5.1(a)(i) of the PPA notes that the Seller will be paid the lower of 75% of the Incremental Energy Rate and 75% of the Energy Rate during the Interim Period (before the Commencement Date (the start of the month after Commercial Operation)) or Extension Period (a term extension at the Seller's option if the Facility has not achieved Commercial Operation by the Scheduled Commercial Operation Date). Section 5.1(a)(ii) operates in a similar way but applies a 50% reduction for Excess Energy during the Term.

[106] CanREA submitted that the reduction in price paid under s. 5.1(a)(i) provides the Seller with a disincentive and doubly penalizes the Seller by shorting payment for deliveries both before and after Commercial Operation. SWEB submitted that because of the existence of the "lower of" clause, there is no reason why the Energy Rate or the Incremental Energy Rate should be factored down further during the Interim Period, the Extension Period or for Excess Energy. SWEB said this creates an unfair price for the value received.

[107] The Procurement Administrator argued that the discount to Net Output during the Interim Period and Extension Period is an incentive for the Seller to reach Commercial Operation within the timeline stipulated in the PPA. Coho also noted that the Seller can declare Commercial Operation prior to the Commercial Operation target date (December 31, 2028) to limit discounted energy payments during the Interim Period. Furthermore, it said the Extension Period allows the Seller to recoup a sizable portion of lost revenue from a failure to achieve Commercial Operation by the Scheduled Commercial Operation Date, and only applies if the Seller elects to extend the term of the

PPA to restore the original full 25-year term of the PPA after failing to achieve Commercial Operation by the Scheduled Commercial Operation Date.

[108] The Procurement Administrator, during the PPA and RFP development window, elected to push the Scheduled Commercial Operation Date back a year to provide the Proponents with greater development and construction flexibility, thereby lessening the risk of not achieving Commercial Operation by the Scheduled Commercial Operation Date.

3.10.1 Findings

[109] The Board agrees that it is important to motivate the Seller to achieve Commercial Operation on time and finds that the proposed reduced energy payments are appropriate. The Board notes that the Procurement Administrator extended the Scheduled Commercial Operation Date deadline to reduce the risk that Sellers would not achieve Commercial Operation on time.

[110] Regarding the reduced rate for Excess Energy, as noted already, managing greater than expected amounts of energy can create grid transmission planning challenges for the system operator. The definition of "Excess Energy" in the PPA already allows for an increase in annual Net Output of up to 20% more than the Energy Bid before the energy becomes "Excess Energy." Given this flexibility and the system issues that could arise from Excess Energy, the Board finds that the reduced rate for Excess Energy is appropriate.

3.11 Section 5.5 – Premiums and Incentives

[111] Section 5.5(d) of the draft PPA noted that NS Power is entitled to "any incentives, payments, grants or other benefits" for the Renewable Energy Credits that

Sellers must assign to NS Power under the agreement, but "without prejudice to any entitlement of the Seller to the Seller Benefits." CanREA questioned what entitlement was contemplated that would not be a Seller Benefit, noting that an "at large theoretical entitlement should not be allowed." CanREA said this subsection should be deleted.

[112] Coho included a revision to s. 5.5(d) in the PPA filed with its Reply Comment to clarify that Renewable Energy Credits will be retained by NS Power. It said other entitlements constitute a Seller Benefit. The Procurement Administrator also advised that the definition of "Renewable Energy Credits" was updated to include carbon credits, portfolio credits, and environmental air quality credits.

3.11.1 Findings

[113] The Board accepts that the elements added to the definition of Renewable Energy Credits are consistent with the other elements in the definition and not similar to the items included in the definition of Seller Benefits. However, all that s. 5.5(d) says after the final proposed revisions is that "NSPI shall be entitled to any Renewable Energy Credits." Given that these are specifically assigned to NS Power under s. 3.4 of the PPA, this seems redundant but the Board will not direct that it be removed from the proposed PPA.

3.12 Section 6.1 – Performance Security

[114] Section 6.1 requires the Seller to maintain security for the performance of various obligations under the PPA. Before Commercial Operation, the Seller must maintain security in the amount of $125,000/MW of Name Plate Capacity of the Facility (Pre-COD Amount). After Commercial Operation, the required amount of security reduces to $20,000/MW (Post-COD Amount).

[115] In addition to these general security obligations, there are two security requirements that apply in specific circumstances. The Seller must provide Transmission Credits Security if it selected the Forgo Network Upgrade and Reimbursement Alternative. The Seller must provide Equipment Certification Security if the Seller's Generating Technology has not been Certified, as required under the PPA, by one year before the Scheduled Commercial Operation Date.

3.12.1 Cash Held in Non-interest-bearing Account

[116] The proposed PPA maintained the option of providing cash security, but changed from the language used in the PPA for the Rate Base Procurement so that the cash security would be held in a non-interest-bearing account instead of an interest-bearing account. The Procurement Administrator explained that it made this change because interested parties commented that any interest earned on cash Performance Security should be returned to the Seller. The Procurement Administrator considered that not investing these funds at all was the appropriate mechanism to address these concerns, reasoning that while NS Power should not be earning revenue on Performance Security held by it, it should also not be liable to account for any interest earned. Both SWEB and the Consumer Advocate expressed concern about this change.

[117] Coho noted the Rate Base Procurement PPA introduced cash as a potential form of security to provide flexibility for Proponents who did not want to post a Letter of Credit. In response to the concerns raised by SWEB and the Consumer Advocate, the Procurement Administrator proposed further revisions to s. 6.1(c) of the PPA so that, rather than prescribing the treatment of interest on cash security, the PPA would allow for alternative types of security (Guarantee or a Letter of Credit or such other credit support)

allowing NS Power and the Seller flexibility to agree on the form of security. Coho also commented that this revision would also limit the administrative burden and potential tax filing consequences caused by prescribing cash security.

3.12.1.1 Findings

[118] The Board considers the request for the Performance Security to be held in an interest-bearing account, with interest accruing to the benefit of the Seller, to be reasonable. The Board finds that directing the Performance Security to a non-interest-bearing account is not beneficial to ratepayers, who might otherwise expect that the benefit to Sellers would flow into the RFP response for the Green Choice Program, as noted by the Consumer Advocate. To the extent that there is concern about NS Power having to account to Sellers for this interest, it could be stipulated that the Performance Security is to be held in an interest-bearing savings account of a chartered bank in Canada, unless the parties agree otherwise.

[119] However, the final version of the proposed PPA provides flexibility around the required credit support for Performance Security and no longer stipulates that when cash is used, it must be held in a non-bearing-interest account (the latest version no longer explicitly references cash security). As such, the parties are free to agree to a variety of arrangements, which the Board finds reasonable.

3.12.2 Letter of Credit

[120] The PPA defines "Letter of Credit" in s. 1.1:

> Letter of Credit – means one or more irrevocable and unconditional standby letters of credit substantially in the form attached hereto as Exhibit "D" issued by a financial institution, with offices or branches (at which office or branch the Letter of Credit may be redeemed or drawn upon) in Halifax or such other location in Canada as may be accepted by NSPI, in NSPI's discretion, listed in either Schedule I or II of the *Bank Act* (Canada) or having a minimum credit rating of (i) A-with Standard and Poors Rating Group (a division of McGraw-Hill Inc.) or its successor, (ii) A3 with Moody's Investors Service, Inc. or its successor, (iii)

> A-low with Dominion Bond Rating Service Limited or its successor, or (iv) A- with Fitch IBCA, Duff and Phelps, a division of Fitch Inc. or its successor.

[121] SWEB submitted this definition unnecessarily limits or complicates the financing options for Proponents by requiring a bank to have a branch or office in Halifax. SWEB suggested allowing the banks under this section to have branches within Canada or the United States. SWEB noted that during the Rate Base Procurement process, NS Power submitted this was necessary to avoid "expenditure of additional financial and personnel resources" for NS Power in the case that one of its employees would have to travel to another province in Canada if it was necessary to draw on the Letter of Credit. SWEB argued this cost was minor and removing this restriction would allow Proponents more flexibility.

[122] Coho does not agree with SWEB and submitted the definition provides flexibility, at the discretion of NS Power, to accept a Letter of Credit issued by a financial institution in another location in Canada.

3.12.2.1 Findings

[123] As SWEB noted, this provision was the subject of interest in the proceeding before the Board about the PPA for the Rate Base Procurement. In that proceeding, the Procurement Administrator originally proposed a provision like SWEB's proposal in this proceeding. This was a change from a PPA the Board approved for use for a procurement of renewable energy by the Renewable Electricity Administrator under an earlier version of the *Renewable Electricity Regulations* in 2012 (Matter M04838; 2012 NSUARB 49).

[124] As noted, NS Power expressed concern about this provision and the expenditure of financial and personnel resources. NS Power also expressed concern

about delay, pointing out that Halifax has a significant representation of large financial institutions, including all the "Big Five" banks and multiple other large financial institutions.

[125] The Board accepted the Halifax branch requirement in the previous PPAs it approved and agrees with the concerns that NS Power previously expressed and its observation that many financial institutions are located in Halifax. The ability to provide a Letter of Credit from a financial institution located elsewhere in Canada, albeit at NS Power's discretion, also provides some flexibility. The Board finds the definition proposed by the Procurement Administrator is appropriate.

3.12.3 Pre-COD Amount

[126] Natural Forces submitted that Performance Security is appropriate but recommends that the Pre-COD Amount for Performance Security should be reduced to no more than $60,000/MW. In its submissions to the Board it said:

> ...We note that this amount is more than five (5) times higher than New Brunswick, three (3) times that of Québec, almost two and a half (2.4) times New York, and two (2) times that of British Columbia. We submit that a Performance Security of $125,000/MW is inconsistent with the level of both opportunity presented by the [Green Choice Program], and risks faced by Sellers that are outside of their control.
>
> [Natural Forces Comments, January 5, 2024, p. 6 (footnotes omitted)]

[127] In response, Coho noted the level of security under the proposed PPA is in line with previously approved agreements, such as the 2021 Rate Base Procurement PPA. The Procurement Administrator said the high security amount minimizes the financial burden on ratepayers if a project defaults, exposing them to reliance on high-cost fuel resources and federal carbon taxes. Coho even suggested that if the cost of replacement fuel continues at current levels, it is likely that the cost of replacing lower cost generation from Green Choice Program projects with higher cost fossil resources will exceed the security amount.

[128] The Procurement Administrator went on to note that the Green Choice Program is intended to enable lower cost electricity in a region predominantly powered by high-cost carbon intensive fuel resources and the renewable electricity standard of 80% renewable electricity by 2030.

3.12.3.1 Findings

[129] The doubling (or more) of the Pre-COD Amount for Performance Security compared to the other jurisdictions mentioned by Natural Forces is a concern. However, the Board notes that the circumstances existing in those jurisdictions, and their access to alternative sources of electricity, are different than what currently exists in Nova Scotia. Generally, Nova Scotia's options are currently more limited. As such, the Board accepts that the consequences of the failure of a Green Choice Program project may be more significant. Despite its concern, the Board finds it would be prudent to continue with a Pre-COD Amount that is consistent with the recent Rate Base Procurement.

3.12.4 Equipment Certification Security

[130] This decision has already addressed CanREA's submission that the requirement for Equipment Certification under the PPA should be removed. However, CanREA also submitted that the requirement for specific security for the obligation to provide this certification is unnecessary because there is already an obligation to provide Performance Security. As such this requirement only adds costs for no additional benefits to NS Power's ratepayers.

[131] Coho said the intention of the Performance Security is to secure all obligations of Sellers under the PPA, whereas the Equipment Certification Security is intended to secure against a Sellers inability to receive equipment certification, which is

a minimum criterion of the Request for Proposals for the Green Choice Program. The Procurement Administrator argued that additional Equipment Certification Security was required, separate from the Performance Security, so as to not require additional Performance Security from Proponents who already satisfy the equipment certification requirements.

3.12.4.1 Findings

[132] The Board agrees with the Procurement Administrator. Equipment Certification is a fundamental requirement and the amounts needed for general Performance Security should assume this fundamental requirement has been met. If it has not, it is appropriate that an additional security requirement be placed on those parties who have not confirmed they meet the baseline requirements. The Board finds the additional Equipment Certification Security is appropriate and should be included in the PPA.

3.13 Section 9.1 – Term

[133] Section 9.1(c) of the draft PPA included a provision requiring the parties to exclusively negotiate a new PPA beginning no later than 18 months before the end of the Term. It precluded the Seller from negotiating for the sale of energy to another party until the last year of the Term. CanREA submitted this was restrictive and should be removed to allow greater freedom of contracting for Proponents. SWEB said the provision was anti-competitive and unduly limited the Seller's possibility to negotiate further offtake after the Term. SWEB said this term should be deleted.

[134] The Procurement Administrator responded to the concerns raised by CanREA and SWEB by proposing revisions to this provision in its Reply Comment. Coho

said it removed the exclusivity requirements from s. 9.1(c) to allow greater freedom of contracting for the Seller but retained a right of NS Power to commence non-exclusive negotiations with the Seller for a period of 6 months preceding the 12-month period before expiry of the PPA.

3.13.1 Findings

[135] The Board finds that the revision to s. 9.1(c) strikes an appropriate balance between the desire to continue the benefit of renewable energy projects by NS Power, and by extension its customers, and the ability of the proponents of those projects to move forward in a way that makes the most economic sense to them. Unlike as originally drafted, the revised provision mandates only non-exclusive negotiations if requested by NS Power at least 18 months before the end of the Term. If that occurs, the Seller may negotiate with other parties, but could not conclude a contract with them before the last year of the Term.

3.14 Section 10.1 – Seller Events of Default

[136] Section 10.1 of the PPA identifies several events that are considered to be a Seller Event of Default under the agreement. CanREA suggested additional language to the provision in s. 10.1(a) about the failure to make payments, which was accepted by the Procurement Administrator and included in the revised PPA submitted with Coho's Reply Comment. The Board makes no further comment about this in this decision.

[137] CanREA also commented on s. 10.1(f), which makes a breach of s. 2.1(b) of the agreement a Seller Event of Default. Section 2.1(b) prohibits making Project Amendments without prior written consent. CanREA submitted given s. 2.1(b) of the

agreement, creating a separate Seller Event of Default in s. 10.1(f) was redundant. CanREA also requested clarity about the curative provisions for defaults.

[138] The Procurement Administrator noted that s. 10.1 of the PPA defines various events that are a "Seller Event of Default." It said a Seller Event of Default (described in s. 10.1(f) of the PPA) is a failure of the Seller to follow s. 2.1(b) of the PPA. Section 2.1(b) of the PPA addresses consent requirements for amendments to the Site, Name Plate Capacity of the Facility, Energy Bid, Energy Source and Zone. Coho said it revised the Seller Event of Default in s. 10.1(f) to create a limited cure period for breaches of s. 2.1(b) (only about a change to Site or Name Plate Capacity) in response to an earlier comment it received.

[139] Coho argued that s. 10.1(f) is not redundant or duplicative. It said if the provision were deleted, the failure to comply with s. 2.1(b) would constitute a Seller Event of Default under s. 10.1(j) of the PPA only after a 30-to-90-day cure period and only if the breach could be demonstrated to have a material adverse effect on the rights of NS Power or on the ability of the Seller to perform its obligations under the PPA.

[140] Coho said it was intentional that a breach of s. 2.1(b) would not be subject to a materiality threshold or an extended cure period prior to becoming a Seller Event of Default. It said s. 2.1(b) of the PPA restricts the Seller from making changes to fundamental characteristics of the Facility that were part of the Seller's RFP Proposal without obtaining NS Power's consent and the Seller should not benefit from materiality qualifiers and extended cure periods if it breaches its covenants under s. 2.1(b).

[141] The Procurement Administrator noted that s. 10.2(a) of the PPA refers to remedy or cure within "the time, if any, allowed pursuant to this Agreement." Coho said

that s. 10.1 of the PPA defines each Seller Event of Default and each specific subsection indicates whether the breach is subject to a cure period before becoming a Seller Event of Default.

3.14.1 Findings

[142] The Board agrees with Coho's comments and accepts the intentionality around the decision to not include curative provisions for breaches of s. 2.1(b) of the PPA (other than a limited opportunity to reverse a change to the Site or Name Plate Capacity). The Board observes that a breach of s. 2.1(b) would be triggered by a specific action by the Seller and would be under the Seller's control. The Board finds s. 10.1(f) should not be deleted.

3.15 Section 11.1 – Force Majeure

[143] Section 11.1 defines "Force Majeure" for the purposes of the PPA. Section 11.1(b) lists events or circumstances that would not be a Force Majeure Event.

3.15.1 Generator Interconnection Processes

[144] Section 11.1(a)(v) of the PPA filed with the application included delays relating to the interconnection of the Facility to the System, Network Upgrades or the Interconnection System Impact Study. SWEB suggested adding language to this provision due to delays experienced during the 2021 Rate Base Procurement Request for Proposals. The Procurement Administrator accepted the basis for the suggestion but modified the suggested language in the draft of the PPA submitted with its Reply Comment.

3.15.1.1 Findings

[145] The Board reviewed the suggested changes and proposed revisions and finds they are substantively similar. The Board finds the language Coho proposed to be clearer, and therefore preferable. The Board notes that the "catchall" language that SWEB included ("or any other study, agreement or document") was not carried over into the revisions proposed by the Procurement Administrator. As the Board understands the specific documents of concern have been identified, it finds this added language is unnecessary.

3.15.2 Supply Chain Disruptions

[146] In the PPA filed with the application, it was proposed that s. 11.1(b)(v) would exclude the following from relief under the Force Majeure provisions of the agreement:

> any direct or indirect delay in obtaining, or failure to obtain, any labour, materials, equipment or other resources, except where such delay or failure is caused by another event which is not an Excepted Relief Event but otherwise falls within the definition of Force Majeure Event.

[147] CanREA and SWEB both expressed concerns about this provision given recent global supply chain issues that could cause disruptions beyond a Seller's control, thus placing the burden of such delays entirely on the Seller. They recommended including a subsection of the Force Majeure definition to allow for supply chain disruptions and delays beyond the Seller's reasonable control.

[148] The Procurement Administrator filed a revised PPA with its Reply Comment that deleted s. 11.1(b)(v) as an excluded event under the PPA, but it did not add a specific event in the definition of "Force Majeure" relating to supply chain disruptions. Referring to the language in s. 11.1(a), Coho submitted that if a supply chain disruption and delay is an "event or circumstance that is beyond the control of the affected Party and...has not

been wholly or partly caused by, or attributed to, the act or omission or negligence of the Affected Party and that the Affected Party is unable to avoid or overcome using Commercially Reasonable Efforts" this event or circumstance would qualify as a "Force Majeure" under the PPA. Coho said the expectation is that Sellers will use diligence to manage supply chain disruptions and the evidentiary standards that apply to any other Force Majeure claim will also apply to supply chain disruptions.

3.15.2.1 Findings

[149] The Board finds that the deletion of s. 11.1(b)(v) means that supply chain disruptions are no longer excluded events for the purposes of applying the Force Majeure provisions of the PPA. The Board agrees with the Procurement Administrator that with this deletion, supply chain disruptions may constitute a Force Majeure if they satisfy the criteria in s. 11.1(a). The Board finds it is unnecessary to specifically list supply chain disruptions in the listed examples in s. 11.1(a).

3.16 Section 13.1 – Change in Law

[150] Section 13.1 of the PPA establishes a mechanism to deal with some Changes in Law that would increase the cost or affect the net revenues of the Seller. It triggers negotiations, and possibly the dispute resolution procedures, under the PPA. As proposed, a Change in Law only includes matters under provincial jurisdiction and does not include changes to federal laws.

[151] CanREA and the Consumer Advocate said the definition should be changed to include federal laws. CanREA noted the federal government is active in energy policy and regulation and said that changes to federal laws that affect net revenues should be included. The Consumer Advocate submitted that the Change in Law provision should

account for changes in law that both materially reduce the benefits Sellers expect under the PPA or increase them, noting that unexpected material benefits should flow to NS Power's customers rather than become windfalls for Sellers.

[152] The Procurement Administrator said the Change in Law provisions only contemplate changes in law at the provincial level because the burdens of Change in Law provisions will be borne by ratepayers in the province. The Procurement Administrator also argued that the Seller is entitled to the benefit of the introduction of new federal programs and grants as these constitute Seller Benefits that are retained by the Seller and it would be unbalanced for the Seller to receive the benefit of any federal change in law but to require provincial ratepayers to bear the cost of any federal changes in law. The Procurement Administrator also suggested that, over the last decade, there is limited evidence of federal law changes negatively impacting renewable energy development in a significant manner.

[153] The Consumer Advocate suggested that the Change in Law provision should apply to NS Power in limited circumstances to protect against the possibility that federal legislation could be introduced between the date on which bids are submitted and the Seller's project begins commercial operation that provides material benefits to the Seller that are not accounted for in the PPA. The Procurement Administrator suggested that in the scenario of a cash windfall resulting from federal legislative changes, the Proponent and ratepayers stand to benefit. However, it said that in the inverse scenario, where federal legislative changes or constraints negatively impact projects, ratepayers would bear the full burden.

3.16.1 Findings

[154] As with many of the issues raised in comments provided to the Board in this proceeding, this issue raises questions about the balancing of risk between the parties to the proposed PPA. In many cases, there are clearly no right or wrong answers and the approach is more about balance and fairness. Risk that is removed from Sellers will generally fall to NS Power's ratepayers. Risk left with or shifted to Sellers will likely be reflected in the proposals received for the project, producing higher rates that will be paid by ratepayers.

[155] The Green Choice Program is established by provincial law and in pursuit of Provincial objectives, including the Province's renewable electricity standards. It could therefore be expected that proponents might be more likely to assume that Provincial laws would not change to the detriment of the Program and their projects and perhaps more appropriate that those expectations be protected in the terms of the PPA.

[156] On this issue, the Board recognizes that the proposed PPA leaves the risk of changes in federal laws with Sellers. However, the Board finds there is no compelling reason to vary this provision from what was included in the PPA approved by the Board for the Rate Base Procurement.

3.17 Exhibit H – Calculation of Adjusted Energy Rate

[157] As noted earlier in this decision, one of the key changes made to the proposed PPA for the Green Choice Program compared to the PPA approved by the Board for the Rate Base Procurement was the inclusion of an energy rate price escalator to adjust the energy rate for inflation during the development and construction period for projects. The formula for the Energy Rate adjuster is set out in Exhibit "H" to the PPA.

3.17.1 Energy Rate Floor

[158] CanREA and SWEB expressed concern that the wording in the proposed PPA could result in a negative CPI adjustment and an Adjusted Energy Rate less than the defined Energy Rate per the Commercial Terms, potentially increasing rather than decreasing risks. They both suggested adjustments to the language in Exhibit "H" to address this concern.

[159] The Procurement Administrator accepted these suggestions and much of the language proposed by SWEB with some modifications.

3.17.1.1 Findings

[160] The Board finds that Coho's revisions to Exhibit "H" in its Reply Comment address the issue raised by CanREA and SWEB about the potential for a reduction in the Energy Rate and that the language is substantively the same as proposed by SWEB. The Board finds Coho's revisions to be appropriate.

3.17.2 Energy Rate Adjustment After Commercial Operation

[161] The Consumer Advocate said requiring a Seller to bear the entire risk of price escalation over the duration of the Term may result in unnecessarily high pricing or an unnecessary risk of default. The Consumer Advocate suggested modifications to the PPA that would allow for escalation of the otherwise-fixed Energy Rate after a year with unusually high inflation rates and for the Procurement Administrator to assume a percentage of the Energy Rate that is attributable to operations and maintenance costs.

[162] The Procurement Administrator said the escalation of the Energy Rate is intended to mitigate the risk to Sellers of increases in development and construction costs up to Commercial Operation and noted these costs would not be impacted by inflation

after that. Coho submitted that although operating expenses would be subjected to inflation after Commercial Operation, they are a much smaller portion of development costs, and thus Energy Rate calculations.

[163] The Procurement Administrator also submitted that the adjustment mechanism for the Energy Rate in Exhibit "H" of the PPA was consistent with others seen in the market, such as the 2021 Hydro-Quebec call for 1,300 MW of renewable energy and 1,000 MW of wind power. It said it was determined that the Adjustment Period should expire no later than December 31, 2027, to align with the expected Commercial Operation Dates of projects.

3.17.2.1 Findings

[164] The Board accepts the Procurement Administrator's comments that most of the inflation risk occurs during the development and construction of projects. The Board finds that risk is addressed in the proposed inflation adjustment mechanism in Exhibit "H". The Board finds that Exhibit "H", as revised by Coho in its Reply Comment, is appropriate for the Green Choice Program PPA.

[165] That said, the Board directs the Procurement Administrator to clarify whether the reference to December 31, 2027, in the description of the end point for the Adjustment Period, is correct. The Board notes that in responding to the Consumer Advocate's comments on this point, the Procurement Administrator said, "the Adjustment Period should expire no later than December 31, 2027, to align with the expected Commercial Operation Dates of projects." However, in its Reply Comments about the discounted rate during the Interim Period and the Extension Period under s. 5.1(a) Coho identified the "COD target date" as December 31, 2028. Coho also said that during the

development of the PPA and the Request for Proposals, it "elected to push the COD back a year to provide the Proponents with greater development and construction flexibility, thereby lessening the risk of not achieving COD by the Scheduled Commercial Operation Date." Based on these comments, the Board wonders whether the date specified in Exhibit "H" should also be December 31, 2028.

4.0 SUMMARY OF BOARD FINDINGS

[166] The Board approves the proposed PPA filed in this proceeding as Exhibit C-3 as the PPA for the Green Choice Program, subject to the changes and clarifications directed in this decision, including:

- an amendment to s. 2.2(a) relating to delays in the delivery of studies, agreements or documents under the Generation Interconnection Procedure by the System Operator to the Seller;
- an amendment to s. 2.2(a) relating to the prohibition against further relief for a Force Majeure Event when an extension to execute and deliver the Generation Interconnection Agreement is granted;
- an amendment to s. 3.3 to provide a cap on fees paid by the Seller for NS Power's third-party vendor of meteorological forecasting services; and
- clarification about the Adjustment Period referenced in Exhibit "H".

[167] Coho is directed to address these items in a compliance filing, to be filed with the Board no later than two weeks from the date of this decision. The compliance filing should include a clean version of the PPA as well as a version showing tracked

changes from the version filed in this proceeding as Exhibit C-3. An Order approving the PPA will be issued following a satisfactory compliance filing.

DATED at Halifax, Nova Scotia, this 28th day of May, 2024.

Stephen T. McGrath

Roland A. Deveau

Richard J. Melanson