

August 3, 2023

Ms. Crystal Henwood
Regulatory Affairs Officer/Clerk
Nova Scotia Utility and Review Board
1601 Lower Water Street, 3rd Floor
P.O. Box 1692, Unit "M"
Halifax, NS B3J 3S3

Re: M10872 – Commercial Net Metering Program 30 Day Report

Dear Ms. Henwood:

On November 25, 2022, Nova Scotia Power Inc. (NS Power, the Company) applied to the Nova Scotia Utility and Review Board (NSUARB, Board) for approval of the Commercial Net Metering Program (CNMP).

In accordance with the NSUARB's Order dated December 12, 2022, Information Requests (IRs) to NS Power were filed on January 13, 2023, by the NSUARB, Synapse (on behalf of Board Counsel), Solar Nova Scotia (SNS), East Port Properties (EPPL), Polycorp Properties Inc. (Polycorp), and the Small Business Advocate (SBA). NS Power filed its responses to the IRs on February 10, 2023.

On February 24, 2023, Synapse (on behalf of Board Counsel), Daymark (on behalf of the SBA) and Patrick D. Bateman (on behalf of SNS) filed intervenor evidence. NS Power did not file any IRs to intervenors. On March 24, 2023, NS Power filed its Reply to intervenor evidence.

NS Power filed its Closing Submission with the Board on April 6, 2023. Closing submissions were also filed by the SBA, the Consumer Advocate (CA), Nova Scotia Department of Natural Resources and Renewables (NRR), Ecology Action Centre (EAC), Polycorp and SNS.

The Board's Hearing Order requested that all parties submit their Reply to Closing by April 14, 2023. Along with NS Power, Reply to Closing Submissions were submitted by SNS. The CA and SBA submitted letters indicating that they would not be filing Reply to Closing Submissions.

The Nova Scotia Utility and Review Board (NSUARB, Board) issued its decision in this matter on July 4, 2023. The Decision included the following directive:

NS Power is directed to provide a compliance filing on or before July 18, 2023, to update the CNMP terms and condition and participation agreement to clarify the exclusion of storage capacity for program availability and the treatment of renewable energy credits as directed above.

NS Power submitted its compliance filing on July 18, 2023. Parties were provided with the opportunity to provide comments on the Compliance filing by July 25, 2023 and NS Power provided response to those comments on August 1, 2023.

In its Reply to Closing Submission, NS Power provided the following:

If NS Power's 90-day request is approved, the Company commits to providing an update to the Board within 30-days of a decision outlining its progress toward completing the necessary tasks for full program implementation. Should the Company be in a position to launch the Program in advance of the 90-day period, it will endeavor to do so.

The Board's Decision Letter included the following directives with respect to NS Power's proposed 30-day report:

- *The Board directs NS Power to implement the Class 1 Net Metering Service within 30 days of the Board's order in this matter and to confirm this has been done in the report it will file with the Board within that 30-days. Following the commitment in its Reply Comments, NS Power is to provide an update on its progress toward completing the necessary tasks for full program implementation in its 30-day report and should implement the Class 2 Net Metering Service earlier than 90 days if it is able to do so.*
- *The Utility said it is establishing Service Standards for Class 1 applications and has set timelines for each step: 25 business days for review and pre-approval; 20 business days for field inspections; and 10 business days for authorization. NS Power said it would provide its proposed standards to the Board in advance of or concurrently with program implementation, which (as discussed above) should occur within 30 days of this decision. The Board agrees that standards for Class 2 should be considered in M10905 and expects proposed Class 1 standards in 30 days of its order in this matter.*

- *NS Power said it would work to develop acceptable criteria for Class 2 but did not consider that a similar “fast-track” option for Class 1 would provide a material benefit to applicants because Class 1 generation projects are typically less complex and requiring less study than Class 2 projects. The Board accepts this and directs NS Power to update the Board on its progress developing criteria for fast-tracking Class 2 approvals in the 30-day report noted above.*
- *NS Power agreed to publish a draft analysis of the “hosting capacity” of the Company’s substations and feeders as soon as possible. This analysis will then be refined and updated within eight months. The Company submitted that further enhancements, such as a dynamic hosting map, would be examined in M10905. The Board accepts NS Power’s approach and directs the Company to provide its initial analysis within 30 days of the Board’s order in this matter and to include an update on its progress refining and updating this information in its annual net-metering report to be filed on or before March 31, 2024.*

The Board’s directives are addressed in the sections that follow.

Class 1

Implementation Progress

NS Power confirms that the Class 1 Commercial Net Metering Service was implemented on August 3, 2023. Program information and associated documents such as application forms, installer guide, and Frequently Asked Questions will be made publicly available at nspower.ca (<https://www.nspower.ca/your-business/save-money-energy/make-own-energy>) on August 3, 2023 with the terms and conditions and participant agreement to be added as soon as the Board issues its Order.

Service Standards

NS Power proposes the below targeted service standards for Class 1 Commercial Net Metering (CNM) Service

Task Group: Review and Pre-Approval

Interconnection Request Review	10 Business Days	START	NS Power (Net Metering) receipt of a COMPLETE CNM Interconnection Request and Equipment Information Form (Application)
		STOP	NS Power (Net Metering) completion of Interconnection Review and program acceptance
Electrical Plans Review	15 Business Days	START	NS Power (Net Metering) completion of Interconnection Review and program acceptance and submission of Electrical Plans to NS Power (Inspection Services)
		STOP	NS Power (Inspection Services) completion of Electrical Plans Review and Acceptance.

Exceptions:

- Incomplete or rejected CNM Interconnection Request and Equipment Information Forms (applications) and/or electrical plans will require re-submission and will reset service level and queue position.
- Significant modifications/revisions to design such as capacity, equipment, and locational changes will require the re-submission of an Interconnection Request and Equipment Information Form (application) and will reset service level and queue position.

Task Group: Field Inspections

Rough-In Electrical Inspection	10 Business Days	START	Installer initiates request for Rough-In electrical inspection with NS Power (Inspection Services)
		STOP	NS Power (Inspection Services) completion of Rough-In Inspection or within service level window of requested inspection date
Final Electrical Inspection	10 Business Days	START	Installer initiates request for Final electrical inspection with NS Power (Inspection Services)
		STOP	NS Power (Inspection Services) completion of Final Inspection or within service level window of requested inspection date

Task Group: Finalization and Authorization

Execution of CNM Participant Agreement	5 Business Days	START	NS Power (Net Metering) receipt of a COMPLETE CNM Participant Agreement
		STOP	NS Power (Net Metering) Execution of the CNM Participant Agreement
Account Setup	5 Business Days	START	Final Electrical Inspection completion and Executed CNM Participant Agreement
		STOP	Account Setup Complete and Authorization Provided to Customer to begin operation

Class 2

Implementation Progress

NS Power notes the following progress related to Class 2 Implementation:

1. The existing Distribution Generator Interconnection Procedures (DGIP) accommodate projects taking Class 2 Net Metering Service.
2. NS Power is updating the DGIP:

- To include fast tracking of Inverter Based Resource (IBR) Generating Facilities.
- To accommodate Energy Storage Systems installed in tandem with Renewable Generation (the maximum facility output as identified in the Interconnection request will be utilized for study purposes).

These revisions will be included in the DGIP review process currently underway in Board Matter M10905.

3. NS Power is updating the *Overview of Distribution Interconnection Process (For Systems with Capacity \geq 101 kW including Class 2 Net Metering Service and COMFIT Projects)* document to include Fast Tracking of eligible Inverter Based Resources (IBR).
4. NS Power is updating the NS Power external webpage to make links to the Class 2 Interconnection Requirements documents and to the DGIP more visible.
5. NS Power is developing project tracking spreadsheets for Class 2 Interconnection Requests.
6. NS Power is identifying the necessary revisions to [Regulation 3.6](#) (February 2, 2023) resulting from Bill 145.

Note that none of the above modifications impact the ability of an Interconnection Customer to submit or proceed with a Class 2 Interconnection Request today.

Class 2 Fast-Track Option

Distribution Generator Interconnection Procedures:

NS Power will use the existing Preliminary Assessment process to identify those Inverter Based Resource (IBR) projects that are not expected to have a material impact on the operation of the existing transmission & distribution system inclusive of higher queued projects in the Combined T/D Advanced Stage Interconnection Request Queue.

IBR Fast Tracking will be permitted where the Preliminary Assessment determines that the Generating Facility:

- a. *Has a Point of Interconnection (POI) at the 12.5kV or 25kV voltage level.*
- b. *Has a net Nameplate Capacity \leq 0.5 MW at 12.5kV, or \leq 1.0 MW at 25kV.*

- c. *Is an Inverter Based Resource of a type that is non-sustaining.*
- d. *Is connected to a three-phase distribution circuit that does not include an existing synchronous generator.*
- e. *Is located < 5km from the supply substation if connected at 12.5kV, or < 10km from the supply substation if connected at 25kV.*
- f. *Does not require system network upgrades.*
- g. *Does not have any expected transmission impacts.*
- h. *Has a POI such that:*
 - i) *The path between the Generating Facility POI and the supply substation has a minimum conductor size of #2 AWG ASC.*
 - ii) *There are no step-down transformers or voltage regulators between the Generating Facility POI and the supply substation.*

NS Power is identifying the necessary changes to the DGIP to accommodate IBR Fast Tracking of the Distribution System Impact Study (DSIS). Class 2 Fast tracking as it applies to Inverter Based Resources (IBR) will offer the following refinements to the DSIS process and timelines:

1. Reduced DSIS study deposit (\$2,500 instead of \$10,000).
2. DSIS initiation within 10 Business Days of receipt of all progression milestones per DGIP Section 7.2 and the subsequent assignment of a Combined T/D Advanced Stage Interconnection Request Queue position to the IR (the DSIS will not be required to wait for the next DSIS study window to start as the Preliminary Assessment has shown it has no material impact on higher queued projects and may therefore be performed in advance of, or in parallel with, those higher queued studies).
3. DSIS scope reduction to include at least fault analysis and load flow analysis.
4. DSIS timelines reduced from 90 Calendar Days to 30 Calendar Days.

NS Power is currently reviewing the Distribution Interconnection Requirements for Class 2 IBRs between 100kW and 1MW to simplify the interconnections of these devices.

Draft Hosting Capacity Analysis

NS Power has created an initial version of its hosting capacity tables. These tables include the feeder number; associated distribution zone; feeder voltage; feeder photovoltaics (PV) hosting capacity (kW); and distribution zone hosting capacity (kW) for each feeder and distribution zone in Nova Scotia. The tables are populated utilizing existing distribution generation facility data and advanced metering infrastructure (AMI) meter data for every customer acquired between the hours of 9:00 am and 3:00 pm on the day of minimum system load for 2022.

A separate set of tables will be produced to identify the available wind generation hosting capacity, as this utilizes data related to the hour of actual system minimum load which typically occurs in the early morning hours prior to sunrise. These tables will be posted to the OASIS site by August 03, 2023, and will continue to be revised and improved on an ongoing basis. In addition, NS Power is creating an interactive proof-of-concept Hosting Capacity Map that will utilize this data and be publicly accessible within the 8-month period following this report.

Further developments of the hosting capacity will be pursued in the interconnections proceeding (M10905).

REC Registration and Administration Fees

Section 7(a) of the Commercial Net Metering Participant Agreement provides as follows:

Any expense or cost reasonably incurred by NSPI pursuant to such request shall be for the account of the Customer and the Customer shall promptly reimburse NSPI for any such expenditure or incurred costs.

In progressing the procurement of a renewable energy certificate tracking system from an internationally recognized organization and gaining a better understanding of that process, NS Power now has further clarity on these costs. They consist of the following, which uses the same labor rate as the Application Fee:

- Initial Setup Fee (per meter): \$43.00 CAD
 - o Breakdown:
 - \$28.85/hr x 1.5 hrs
- Monthly Administration Fee (per meter): \$20.00 CAD
 - o Breakdown:
 - Monthly Admin: \$14.43 (\$28.85/hr x 0.5)
 - Annual Subscription Fee for Tracking System Access: \$2.75 USD (\$3.66 CAD)
 - NS Power is charged an Annual Subscription Fee of \$2,500 USD
 - The Annual Subscription Fee for Tracking System Access of \$2.75 USD is estimated based on assumed uptake within the CNMP, Community Solar Garden, and Green Choice Program.
 - A breakdown of how the Annual Subscription Fee for

Tracking System Access was determined is attached
as **Attachment 1**.

- Annual Reporting: \$2.40 (\$28.85/hr X 1.0 hr/12)
- Pass-through Fee to Register and Retire RECs (per REC): \$0.03 USD/REC

NS Power requests approval of these amounts as part of the Boards final Order in this matter.

Yours truly,



Blake Williams
Senior Director, Regulatory Affairs

- c. David Pickles, Chief Operating Officer
Judith Ferguson, EVP Legal, Regulatory and Government Relations

Year	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	WACC 6.48%	
						Total (5 year)	NPV (5 Year @ WACC)
Annual Cost	2,500.00	1,275.00	1,300.50	884.34	902.03	6,861.87	5,896.55
Customers Electing for RECs	15	30	45	60	75	75	
Revenue	493.33	986.66	1,479.99	1,973.32	2,466.65	7,399.95	
Profit (Loss)	(2,006.67)	(288.34)	179.49	1,088.98	1,564.62	538.09	(0.00)

'Annual Cost' is the REC Tracking System subscription fee 2,500 USD per Year
 5 Year Revenue Requirement \$5,897
 Monthly RR for Term \$98
 Monthly Cost per customer \$2.74

Assumptions

Assumes 2% inflation in platform cost
 All costs are in USD
 5 year term forecast
 Assumes 15 new customers electing for RECs through CNM each year
 Preferred to split platform cost with CSG in years 2, 3, and with CSG and GCP in years 4 and 5

Recommendation

Based on the table, and assumptions, noted above – Commercial Net Metering will need to charge \$2.74 per month to each participant that opts-in to receive renewable energy certificates (RECs).