

BEFORE THE NOVA SCOTIA ENERGY BOARD

In the Matter of a review of Nova Scotia Power Incorporated's
2024 Annual Report for the Commercial Net Metering Program in accordance with the
Electricity Act and Section 37C(1) of the *Renewable Electricity Regulations*.

(M12164)

**Evidence of
Melissa Whited**

**On Behalf of
Counsel to Nova Scotia Energy Board**

June 11, 2025

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS..... 1

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS..... 3

III. INTRODUCTION AND OVERVIEW..... 4

IV. SERVICE STANDARD FOR EXECUTING CNMP PARTICIPANT AGREEMENTS..... 5

V. UPDATES AND REFINEMENTS TO HOSTING CAPACITY ANALYSIS 9

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, title, and employer.**

3 A. My name is Melissa Whited. I am a Vice President at Synapse Energy Economics, Inc.
4 ("Synapse"), located at 485 Massachusetts Avenue, Cambridge, MA 02139, USA.

5 **Q. Please describe Synapse Energy Economics.**

6 A. Synapse is a research and consulting firm specializing in electricity and gas industry
7 regulation, planning, and analysis. Our work covers a range of issues, including economic
8 and technical assessments of demand-side and supply-side energy resources; energy
9 efficiency policies and programs; integrated resource planning; electricity market
10 modeling and assessment; renewable resource technologies and policies; and climate
11 change strategies. Synapse works for a wide range of clients, including attorney generals,
12 offices of consumer advocates, public utility commissions, environmental advocates, the
13 U.S. Environmental Protection Agency, U.S. Department of Energy, U.S. Department of
14 Justice, the Federal Trade Commission, and the National Association of Regulatory
15 Utility Commissioners. Synapse's staff includes over 35 professionals with extensive
16 experience in the electricity industry.

17 **Q. Please summarize your professional and educational experience.**

18 A. I have 14 years of experience in economic research and consulting. At Synapse, I have
19 worked extensively on issues related to utility regulatory models and rate design. I have
20 been an invited speaker in numerous industry conferences, including as a panelist for the
21 National Association of Regulatory Utility Commissioners (NARUC) Subcommittee on
22 Rate Design at the 2021 Winter Policy Summit and the 2018 Annual Meeting.

1 I have sponsored testimony before the Newfoundland and Labrador Board of
2 Commissioners of Public Utilities, the Massachusetts Department of Public Utilities, the
3 Illinois Commerce Commission, the New Hampshire Public Utilities Commission, the
4 Georgia Public Service Commission, the Rhode Island Public Utilities Commission, the
5 Maine Public Utilities Commission, the California Public Utilities Commission, the
6 Hawaii Public Utilities Commission, the Public Service Commission of Utah, the Public
7 Utility Commission of Texas, the Virginia State Corporation Commission, and the
8 Federal Energy Regulatory Commission. I hold a Master of Arts in Agricultural and
9 Applied Economics and a Master of Science in Environment and Resources, both from
10 the University of Wisconsin-Madison. My resume is attached as Appendix A.

11 **Q. Have you previously testified before the Nova Scotia Energy Board?**

12 A. Yes. I testified in Matter Nos. M11441, M09777, M10176, M10431, M10810, M10832,
13 and M11626.

14 **Q. On whose behalf are you providing evidence in this case?**

15 A. I am providing evidence on behalf of Counsel to the Nova Scotia Energy Board
16 (“Board”).

17 **Q. What is the purpose of your evidence?**

18 A. My evidence addresses certain aspects of Nova Scotia Power Incorporated’s (NS Power)
19 2024 Annual Report for the Commercial Net Metering Program (CNMP) related to
20 timeliness of executing CNMP participant agreements, and enhancements to the hosting
21 capacity analysis.

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Q. Please describe your conclusions.

A. My conclusions are as follows:

- NS Power did not meet the 5-day service standard for executing the CNMP Participant Agreements, in part due to how this metric is defined, and in part due to occasional delays on the Company's part.
- The Company proposes to begin tracking this metric from the date of the final electrical inspection, and to extend the standard for executing participant agreements from 5 days to 10 days.
- There currently appear to be missed opportunities for mitigating delays through tracking the specific causes for delays.
- The Company has largely addressed Synapse's recommendations regarding hosting capacity analysis improvements by including advanced queued generation in the hosting capacity calculations, and through ongoing or planned additional enhancements. However, NS Power should make its hosting capacity calculations more transparent and should continue to report on its progress in terms of increasing the accuracy and frequency of hosting capacity updates.

Q. What are your recommendations?

A. I recommend that the Board:

- Accept NS Power's proposal to extend the 5-day service standard for executing the CNMP participant agreements to 10 days and direct the Company to begin

1 tracking the number of days taken to execute CNMP Participant Agreements from
2 the final inspection date.

- 3 • Direct NS Power to track delays in meeting the established service standard and
4 submit an addendum to its Final Report detailing specific causes for the delays in
5 2025.

- 6 • Direct NS Power to make the inclusion of advanced queue generation in hosting
7 capacity calculations explicit to avoid customer confusion.

- 8 • Require NS Power to continue to provide updates on hosting capacity data and
9 analysis enhancements in future commercial net metering program annual reports
10 or additional stakeholder workshops.

11 III. INTRODUCTION AND OVERVIEW

12 **Q. Please provide an overview of Nova Scotia Power's Commercial Net Metering**
13 **Program Annual Report.**

14 A. On March 27, 2025, NS Power filed its 2024 Annual Report for the Commercial Net
15 Metering Program. The annual report was established in compliance with the Board's
16 November 1, 2023, order. The report and its accompanying appendices provide detailed
17 information regarding the Company's ability to meet its service standards, updates on the
18 hosting capacity analysis and interconnection process through stakeholder workshops,
19 additional statistics and reporting insights on Class 1 and Class 2 resources, as well as
20 details on any planned or pending improvements to its commercial net metering program.

IV. SERVICE STANDARD FOR EXECUTING CNMP PARTICIPANT AGREEMENTS

Q. Did NS Power achieve all of its established Class 1 service level standards?

A. No. In 2024, NS Power met five of the six Class 1 service standards. The Company did not meet the 5-day service standard for the Execution of CNMP Participant Agreements. The Company's average service level for this task was 18 days – far exceeding the 5-day standard. The Class 1 service levels for 2024 as reported by NS Power are summarized in the table below.¹

Table 1. Summary of 2024 Class 1 Service Levels and Performance

Task Group	Task	Service Standard	2024 Avg. Service Levels	Met
Review and Pre-Approval	Interconnection Request Review	10 business days	3 business days	Yes
	Electrical Plan Review	15 business days	8 business days	Yes
Field Inspections	Rough-in Electrical Inspection	10 business days	8 business days	Yes
	Final Electrical Inspection	10 business days	8 business days	Yes
Finalization and Authorization	Execution of CNMP Participant Agreement	5 business days	18 business days	No
	Account Setup	5 business days	3 business days	Yes

¹ Nova Scotia Power, *Commercial Net Metering Program–2024 Annual Report*, Matter No. M12164 (March 27, 2025), at 7. (“CNMP 2024 Annual Report.”)

1 **Q. Does the Company provide any specific reasons for why it was unable to meet its**
2 **established service standard for execution of participant agreements?**

3 A. Yes. The Company notes two primary reasons for why it failed to meet the 5-day
4 standard for Participant Agreement execution:

5 1. The majority of customers submitted their Participant Agreement before
6 completion of the final electrical inspection, “effectively starting the clock on the
7 five (5) business day service standard before these agreements reasonably
8 required execution.”²

9 2. A small number of outliers (such as customer submission of the Participant
10 Agreement very early in the process, or “one-off delays in execution on the
11 Company’s part”) may have skewed the average.³

12 **Q. What were the causes of delays in execution of the Participant Agreement on the**
13 **Company’s part?**

14 A. The Company cites examples such as periods of higher-than-normal volumes and
15 operational circumstances (e.g., storm response) causing short-term delays. However, the
16 Company does not track specific causes of these delays, so it could not provide further
17 analysis of the causes.⁴

² CNMP 2024 Annual Report, at 7.

³ CNMP 2024 Annual Report, at 8.

⁴ NSPI (NSEB) IR-2.

1 **Q. Does the Company propose making any adjustments or modifications to its**
2 **established service standard for execution of the CNMP Participant Agreement?**

3 A. Yes, the Company proposes two modifications. First, the Company proposes to redefine
4 how the metric is calculated so that the clock begins on the date of final electrical
5 inspection, rather than the date of the customer's completed submission.⁵ Second, the
6 Company proposes to extend the service standard for executing CNMP Participant
7 Agreements from 5 days to 10 days.⁶

8 **Q. Do you support calculating the timeframe for executing the Participant Agreement**
9 **based on the date of the final electrical inspection?**

10 A. Yes. It is reasonable that the service standard is calculated based on when the Company
11 could reasonably execute the Participant Agreement, which is upon completion of the
12 final electrical inspection. Further, the Company states that "[c]loser alignment of
13 agreement execution to final electrical inspection reduces the need for amendments to
14 capture revisions to the installation and can further reduce barriers to the energization of
15 customer equipment following site approval."⁷

16 **Q. Why is the Company proposing to extend the service standard to 10 days?**

17 A. The Company explains that the original 5 business day target was established based on
18 historical averages from its Legacy Net Metering program, prior to its experience with
19 the CNMP. However, NS Power states that its experience with the program over 2024

⁵ CNMP 2024 Annual Report, at 9.

⁶ CNMP 2024 Annual Report, at 9.

⁷ NSPI (Synapse) IR-3

1 has “provided valuable learnings for the Company related to service standard targets for
2 this task in particular,”⁸ and that the 10 business day timeframe “allows NS Power to
3 complete several key steps – such as reviewing the submitted agreement, verifying
4 technical and administrative details, and executing the agreement – while maintaining
5 quality and consistency, particularly during periods of higher volume.”⁹ Further, NS
6 Power expects that it would be able to meet the 10-day service level target (assuming that
7 performance is measured from the date of final inspection, as discussed above).¹⁰

8 **Q. Is it reasonable to extend the service standard to 10 days?**

9 A. Yes, the Company’s proposal generally appears reasonable. Although this target is longer
10 than originally contemplated, it is comparable to targets in California¹¹ and
11 Massachusetts,¹² and is unlikely to result in excessive project delays. However, I
12 recommend that this extension of the target timeframe be accompanied by additional
13 reporting regarding projects experiencing significant delays to ensure that the Company
14 continues to strive to minimize such situations. Specifically, I recommend that the Board
15 direct NS Power to track and report the reasons for delays where Participant Agreement
16 execution times exceeded 15 business days following the final electrical inspection. In its

⁸ CNMP 2024 Annual Report, at 9.

⁹ NSPI (SBA) IR-1

¹⁰ NSPI (NSEB) IR-1

¹¹ Pacific Gas & Electric Company. Electric Rule No. 21. February 28, 2023. Available at:
<https://www.pge.com/assets/pge/docs/about/doing-business-with-pge/elec-rules-21.pdf>.

¹² Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid, *Standards for Interconnection of Distributed Generation*. M.D.P.U. No. 1468, September 15, 2021. Available at:
https://www.nationalgridus.com/media/pdfs/billing-payments/tariffs/mae/mdpu_1468_dg_interconnection_tariff_.pdf.

1 subsequent annual reports, NS Power should include information regarding the number of
2 projects in which Participant Agreement execution times exceeded 15 business days, the
3 reasons for such delays, and any steps the Company is taking to address these issues.

4 **V. UPDATES AND REFINEMENTS TO HOSTING CAPACITY ANALYSIS**

5 **Q. Please describe NS Power's current hosting capacity analysis and website.**

6 A. Since February 2024, NS Power has published an interactive hosting capacity map on its
7 website. The Company updates this map with each Distribution System Impact Study
8 (DSIS) group period. In M11626, Synapse recommended NS Power update the hosting
9 capacity map and table after the approval of 500 kW or more of generation on a single
10 feeder between each DSIS to provide greater transparency to distributed generation
11 customers. Synapse also recommended that NS Power incorporate additional data on its
12 website, including queued generation capacity by substation and circuit, service
13 transformer daytime minimum load, and whether a substation had been upgraded to
14 accommodate reverse power flow.¹³ In its Decision in M11626, the Board directed NS
15 Power to address Synapse's recommendations in its upcoming hosting capacity
16 stakeholder workshops.

¹³ Synapse Energy Economics. Closing Submission. M11626, June 3, 2024, at 4.

1 **Q. How did NS Power address Synapse’s recommendations in the hosting capacity**
2 **stakeholder workshop?**

3 A. In its April 17, 2025 hosting capacity stakeholder workshop, NS Power provided the
4 following responses to Synapse’s recommendations:

- 5 • NS Power already includes aggregate and advanced queued generating capacity at
6 the substation and circuit level in its hosting capacity calculations. NS Power
7 plans to include this information on the map to improve transparency.
- 8 • It is not necessary to update the hosting capacity map and data table when more
9 than 500 kW of new generation is approved, as advanced queue generation is
10 already included in the map at the beginning of each study window and before
11 SSGIA execution.
- 12 • Providing service transformer daytime minimum load would require node-level
13 modeling, and is likely to provide limited added value, as service transformer
14 minimum load is considered zero for system impact analysis.
- 15 • Providing service transformer ratings is not currently modeled or visualized and is
16 unlikely to be a barrier under current programs.
- 17 • Recommendations regarding substations are outside of the scope of the DGIP, as
18 this is transmission-level analysis.¹⁴

¹⁴ NS Power. Hosting Capacity Map: Stakeholder Workshop presentation. April 17, 2025, at 9.

1 In addition, NS Power noted that it is actively working on incorporating AMI data to
2 identify feeder and zone-level minimum loads to improve load modeling, with the goal of
3 moving beyond system level load snapshots and increase the accuracy of hosting capacity
4 estimates. NS Power expects this work to be completed in 2026. NS Power also plans to
5 evaluate automating modeling and updates to the map in 2026 after it implements GIS
6 improvements. Additionally, NS Power plans to eventually evaluate applying 8760 load
7 and DER profiles to the hosting capacity analysis to enable meaningful node-level
8 results.¹⁵

9 **Q. Based on NS Power's responses, what do you recommend regarding refinements**
10 **and updates to NS Power's hosting capacity analysis?**

11 A. Synapse appreciates the clarifications NS Power provided at the April 17, 2025 hosting
12 capacity stakeholder workshop. With respect to Synapse's recommendation to update the
13 hosting capacity analysis between DSIS groups and to provide information regarding
14 queued generation, Synapse accepts NS Power's explanation that the inclusion of
15 advanced queue generation in its hosting capacity calculations effectively meets the
16 intent of the recommendation. However, to accomplish the goal of improving
17 transparency, Synapse submits that the inclusion of queued generation in the hosting
18 capacity analysis must be communicated to customers. To date, NS Power has not
19 updated its hosting capacity web page,¹⁶ hosting capacity data table,¹⁷ or explanatory text

¹⁵ NS Power. Hosting Capacity Map: Stakeholder Workshop presentation. April 17, 2025, at 10.

¹⁶ <https://www.nspower.ca/oasis/distribution-hosting-capacity>

¹⁷ https://www.nspower.ca/docs/default-source/monthly-reports/distribution-hosting-capacity-table.pdf?sfvrsn=80b70316_26

1 on its interactive map¹⁸ to explain to customers that advanced queue generation is
2 included in the hosting capacity calculations. Synapse recommends that the Board direct
3 NS Power to make the inclusion of advanced queue generation in hosting capacity
4 calculations explicit to avoid customer confusion.

5 Synapse also expects that several of our concerns regarding the frequency of updates and
6 provision of nodal-level data will be addressed in forthcoming enhancements to the
7 hosting capacity analysis, which NS Power is targeting for completion or evaluation in
8 2026. Synapse recommends that NS Power provide updates on these enhancements in
9 future commercial net metering program annual reports or additional stakeholder
10 workshops.

11 **Q. Does this conclude your evidence?**

12 **A.** Yes, it does.

¹⁸ <https://nspi.maps.arcgis.com/apps/webappviewer/index.html?id=67d565f111fe4f1e82444321e1909846>