

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

- and -

**IN THE MATTER OF: NOVA SCOTIA POWER INCORPORATED'S 2025 Load Forecast
Report**

REDACTED INFORMATION REQUESTS

To: **Nova Scotia Power Incorporated**
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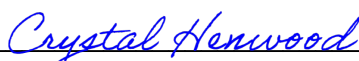
From: Board Staff
Nova Scotia Energy Board

Responses Due: **Tuesday, August 19, 2025**

Copies: 1 electronic copy (PDF searchable)

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Issued at Halifax, Nova Scotia, this 24th day of July, 2025.



Crystal Henwood, Regulatory Affairs Officer/Clerk

Request IR-1:

Figures 1, 2 & 3 in the application present graphs and a table with historic and forecasted Net System Requirement (NSR) and System Peak.

- a) In the 2024 Load Forecast, M11689, the forecast for NSR growth in 2024 was 3.2%, but actual growth was only 1.8%. Why is it appropriate to forecast the 2025 and 2026 NSR higher than the 2024 forecast which overestimated the actual growth?
- b) The graph shows a significant drop in System Peak in 2024, well below the 2023 peak (-14.9%) and the forecasted 2024 forecast peak. Please describe the factors that contributed to this significant decline and why Nova Scotia Power (NS Power) is confident that 2025 will resume the previous forecast track.

Request IR-2:

Page 16 of the application, Historical Class Sales and Energy Data, states that data from NS Power's Advanced Metering Infrastructure (AMI) will be used to improve sales estimates and that this forecast will transition to using the AMI sales data once a sufficient dataset is available.

- a) How large of a dataset does the Load Forecast need from the AMI?
- b) Can the recent AMI data be added to the billed dataset?
 - i. If not, please explain why not and how doing so reduces the forecasts accuracy.

Request IR-3:

Page 20 of the application, Weather Data, explains that the heating degree days (HDD) trend is reduced over time to keep the average annual HDD above zero and to limit the projected number of Cooling Degree Days (CDD) over a 40-year period.

- a) When in the model does NS Power begin to adjust the forecast to avoid zero HDD?
- b) When is the unadjusted model projecting to reach zero HDD?

Request IR-4:

Page 24 of the application explains that housing completions are used to forecast residential customers and that new customer growth "is expected to remain positive but decrease over time, as population growth slows from the expected peak in 2024."

- a) Why does NS Power consider that population growth peaked in 2024?
- b) Please provide the source for Change in Population presented in Figure 13.
 - i. If Statistics Canada's population forecast table 17-10-0009-01 was not used, please explain why.

Request IR-5:

Page 27 of the application explains that the manufacturing employment forecast is based on the 2024 Conference Board forecast because the 2025 forecast shows a significant decrease in employment in 2024 and 2025. NS Power has attributed this result to Statistics Canada reporting and modeling and not an actual drop in employment.

a) Does NS Power consider the data reported by Statistics Canada or the model provided by the Conference Board to be inaccurate?

i. Please confirm, or explain otherwise, that Statistics Canada is not reporting manufacturing job losses of 28,000 or more for 2024 and 2025.

b) Why does NS Power consider it appropriate to use an old forecast that does not align with more current data on employment?

i. Could the forecast be modified to use the data reported from Statistics Canada for 2024?

Request IR-6:

Page 31 discusses that the end-use energy estimates are adjusted so that the intensities are consistent with NRCan consumption and actuals from billing data. Please describe the adjustments made and to which intensities.

Request IR-7:

Page 32 of the application explains that E3's forecast for space heating and EV load shapes are used, in keeping with previous forecasts. Has NS Power tested/compared E3's forecast estimates against actuals to ensure that the near-term projections are accurate?

Request IR-8:

Figure 23 shows the estimated energy and peak impacts comparing NS Power's model to E3 and the adjustments to those estimates.

a) Please describe the adjustments under the Change in Energy Forecast (GWh) and the adjustments made under the Change in Peak Forecast (MW) for 2030.

b) Please explain the changes from the 2024 Load Forecast Report Figure 20 for NS Power HP Peak (MW) for both 2030 and 2035.

c) Please explain how these changes will improve the accuracy of the near term and long-term forecast.

Request IR-9:

Figure 24 provides a table with the Heat Pump Forecast from 2025 to 2035.

a) Please explain why the % Install Non-Elec. Heat has been reduced to 66% from 68% used in the previous Load Forecast.

b) Please explain why the % Install Elec. Heat has been increased to 34% from 32% used in the previous Load Forecast.

Request IR-10:

Figure 25 presents a table with the Water Heater Forecast from 2025 to 2035. There are small differences between Figure 25 and the same table provided in Figure 23 in the 2024 Load Forecast Report. Please discuss the changes made to the forecast, for the estimates from 2031 onward and how these changes are anticipated to improve the accuracy of the forecast.

Request IR-11:

Please discuss the revisions made to Avg. kWh/year and Avg. kW/vehicle on Peak in Figure 28: EV Mileage Assumptions and Load/Peak Modeling Results relative to the 2024 Load Forecast Figure 25.

a) Are the changes reflective of data from the AMI?

Request IR-12:

Please explain why New Load per New EV is significantly higher than the 2024 Load Forecast Report in Figure 26.

Request IR-13:

Figure 37 presents the Commercial and Industrial Electrification Forecasts. Please discuss the revisions made to this table from the 2024 Load Forecast in Figure 32.

Request IR-14:

Please provide an updated version of Figure 38: Comparison of Forecast to Actuals One Year Ahead from the 2024 Load Forecast Report.

Request IR-15:

Page 58 of the application discusses how residential sales expectations have been estimated using downward revised population growth estimates of 21,000 and new housing of 58,000 units.

1 Understanding that some of the new housing units will replace existing housing and some new
2 units may be used for tourism, there appears to be a divergence between the population growth
3 expectations and new housing. Please discuss why NS Power considers using these inputs are
4 appropriate in the forecast.
5

6 **Request IR-16:**

7 Page 60 of the application discusses Building Shell Efficiency (BSE), using U.S. Energy
8 Information Administration (EIA) forecasts from New England. The application states “Building
9 efficiency is expected to improve, although based on calibration done in 2013, improvements are
10 expected to be lower in Nova Scotia...”. NS Power has held this position for several years in the
11 Load Forecast. Given that these calibrations were performed over 10 years ago, why does NS
12 Power still believe that improvements in Nova Scotia still lag those of New England from 12 years
13 ago?
14

15 **Request IR-17:**

16 Page 69 of the application states that Medium Industrial sales will “decline in 2026 and 2027 as
17 load migrates to the RTR market (84 GWh), resulting in an average decline of 1.4 percent over
18 the forecast period.” This projected load for 2026 of 84 GWh is much higher than 39 GWh
19 forecasted in 2024. Please explain the increase.
20

21 **Request IR-18:**

22 Page 70 of the application states that “Load migration to the RTR market is expected to be 34
23 GWh by 2027”. Is this in addition to the 84 GWh identified on page 69? If not, please explain.
24

25 **Request IR-19:**

26 Page 72 of the application explains that NS Power’s model assumes that the Municipal load will
27 be served by a third party after 2025. Has NS Power received confirmation from the customers
28 taking service under the Municipal rate?
29

30 **Request IR-20:**

31 The Atlantic Economic Council (AEC) published an Investment Outlook report: Rising capital
32 investment continues to drive the Atlantic economy forward, on June 24, 2025.
33 <https://atlanticeconomiccouncil.ca/page/InvestOutlook2025>

- 1 a) The AEC report notes that investment in housing is up 17% and identifies growth nodes
2 in the Halifax Regional Municipality that will be developed over the Load Forecast period.
3 Does NS Power have the capacity to address a large increase in demand in a localised
4 area?
- 5 b) The report also mentions that there will be several road infrastructure projects in Halifax,
6 including the Windsor Street Exchange. Have these major infrastructure projects in the
7 same localised area as housing growth been considered in the Load Forecast?
- 8 c) The AEC report notes increased construction on destroyers at Irving Shipbuilding and that
9 defense spending and employment will grow steadily over the Load Forecast period. Of
10 the surveyed industrial customers, has NS Power received a response or an update from
11 the shipyard(s)?
12

13 **Request IR-21:**

14 Page 76 of the application states that peak demand has been estimated to include efficiency
15 programs using their “achievable potential”. Please explain why NS Power considers their
16 achievable potential appropriate to use in the forecast rather than the demonstrated program
17 uptake and recorded energy savings.

- 18 a) Please provide a table comparing the forecast and actual demand response MW for TVP
19 Rate, Business, Non-Profit & Industrial Curtailment and their Total including Total with
20 ELCC for 2024.
21

22 **Request IR-22:**

23 Figure 76 provides a comparison of the 2022 Evergreen Integrated Resource Plan (IRP)
24 Scenarios to the 2024 and 2025 load forecast.

- 25 a) Has the Evergreen IRP E1 – Current Policy and Trends scenario been updated to reflect
26 the current environmental policies and consumer incentives for electrification?
- 27 b) The table shows that the IRP has underestimated the 2024 and 2025 energy demand
28 between 165 and 364 GWh for NSR and between 217 and 209 GWh for Firm Peak.
- 29 c) Given the difference between the 2035 Load Forecast NSR and the IRP NSR forecast for
30 2035, does NS Power consider that IRP and Load Forecast are aligned?

Request IR-23:

Appendix D, page 6 states that, for the sensitivity of energy sales, weather is the strongest variable but “in the long term, economics becomes equally as important as weather... due to the compounding effect of economics over time...”. Please discuss the compounding effects of economics on energy sales in the long term as experienced by NS Power.

Request IR-24:

In reference to the attachments:

- a)
 - i.
 - a.
 - b)
 - i.
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