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Request IR-1:

RE: Action Plan Item 1b

(a) Please explain the potential benefits and limitations associated with Stage 2. Please consider the following examples but do not limit the response to these examples.

- **Quantified available capacity and maximum capacity to access New Brunswick, New England, and Québec energy exports and imports**
- **New projects (or trends in generation investment) that may be available for supply projects**
- **New loads (or trends in loads) that may constrain availability of supply**

(b) On what timeframe would NS Power view Stage 2 as ideally proceeding and what are the practical constraints to achieving that timeframe?

Response IR-1:

(a) Stage 2 of the reliability tie project is currently in the conceptual phase. However, as noted in the NS-NB Reliability Intertie Project Application,¹ the Stage 2 extension could provide additional options to contract for short- or long-term imports (or exports) of energy and capacity, which could include access to energy from the New England market and the development of new nuclear capacity at Point Lepreau. Specifically, Natural Resources Canada's Regional Electricity Corporation and Strategic Infrastructure Initiative (RESCI) study for the Atlantic region, completed in 2018, identified firm imports and exports as the two benefits to an extension to the reliability intertie. Identifying further benefits and limitations associated with stage 2, as per the examples noted in this IR, will require further study.

¹ NS-NB Reliability Tie Intertie Project Application (M12217), April 10, 2025, p.101 of 108.

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

- 1 (b) There is currently no timeline for Stage 2 of the regional transmission. The development
2 of Stage 2 of the project is not required to meet the 2030 targets.

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

1 **Request IR-2:**

2
3 **RE: Action Plan Item 2b**

4
5 **Please provide a description of data that NS Power monitors, or anticipates monitoring, to**
6 **understand trends in electrification impacts. If available, please provide those data. For**
7 **example, number and size of interconnection requests, upgrade requests; number and size**
8 **of overloaded facilities identified for mitigation, etc.**

9
10 Response IR-2:

11
12 In the 2025 IRP Action Plan Update, the monitoring of trends in electrification impacts was related
13 to Action Plan Item 2c and Roadmap Item 6. The impacts of electrification at the system and class
14 level are monitored via the annual load forecast,¹ which will continue to incorporate more AMI
15 data. At the transmission and distribution levels, the types of data to be monitored include SCADA
16 and AMI data. A portion of the noted information requested above (number and size of
17 interconnection requests) can be accessed on the NS Power Oasis site.²

¹ NS Power 2025 Load Forecast Report (M12349), June 27, 2025.

² [OASIS| Nova Scotia Power](#)

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

PARTIALLY CONFIDENTIAL (Attachment Only)

1 **Request IR-3:**

2
3 **RE: Roadmap Item 2**

4
5 **(a) Please provide a summary of NS Power’s seasonal fuel price forecast through 2030.**

6
7 **(b) Please provide a discussion of the current operational practices with respect to**
8 **dispatch of natural gas, HFO, and LFO, including consideration of average fuel prices,**
9 **marginal (spot market) prices, and relative dispatch of the different fuels.**

10
11 **(c) What considerations does the IRP make for sustaining capital investment in**
12 **infrastructure supporting thermal units using the fuels referenced in part (b)?**

13
14 **Response IR-3:**

15
16 **(a) Please refer to Partially Confidential Attachment 1 for the requested data.**

17
18 **(b) A consistent outcome of the Evergreen IRP is the use of emitting resources in a peaking**
19 **capacity to maintain system reliability, serve peak demand, and balance intermittent**
20 **renewable generation. As the grid transitions to meet the 2030 environmental policy**
21 **targets, emitting generation is dispatched during periods of peak customer demand and**
22 **when variable renewable resources (e.g. wind, solar) and BESS are not available. This**
23 **would be the case for the dispatch of natural gas, HFO, and LFO-fueled units. Within the**
24 **emitting fleet, the dispatch mix and profile reflect market prices (dispatched at the lowest**
25 **cost while meeting environmental policy targets), available units and operating capabilities**
26 **for each unit.**

27
28 **(c) Please refer to the IRP assumptions document titled “2022 Evergreen IRP Updated**
29 **Assumptions January 2023 Update.”¹ The sustaining capital assumptions for the Evergreen**

¹ [IRP Evergreen - Updated Assumptions](#)

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

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1 IRP work starts on slide 42 and includes a discussion of the sustaining capital methodology
2 applied. Ultimately, the sustaining capital forecast aligns with the forecast fuel usage
3 outlined in the planning models. If generation support from HFO-fueled resources is
4 required in the planning horizon, sustaining capital investments are forecast to ensure the
5 safe and reliable storage and utilization of these fuels.

2022 Evergreen Pricing

Date	Contract NG (\$/mmbtu)	Market NG (\$/mmbtu)	Future Contract NG (\$/mmbtu)	LFO (\$/mmbtu)
Jan-26				
Feb-26				
Mar-26				
Apr-26				
May-26				
Jun-26				
Jul-26				
Aug-26				
Sep-26				
Oct-26				
Nov-26				
Dec-26				
Jan-27				
Feb-27				
Mar-27				
Apr-27				
May-27				
Jun-27				
Jul-27				
Aug-27				
Sep-27				
Oct-27				
Nov-27				
Dec-27				
Jan-28				
Feb-28				
Mar-28				
Apr-28				
May-28				
Jun-28				
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Aug-28				
Sep-28				
Oct-28				
Nov-28				
Dec-28				
Jan-29				
Feb-29				
Mar-29				
Apr-29				

2022 Evergreen Pricing

Date	Contract NG	Market NG	Future Contract NG	LFO
May-29				
Jun-29				
Jul-29				
Aug-29				
Sep-29				
Oct-29				
Nov-29				
Dec-29				
Jan-30				
Feb-30				
Mar-30				
Apr-30				
May-30				
Jun-30				
Jul-30				
Aug-30				
Sep-30				
Oct-30				
Nov-30				
Dec-30				

	HFO (\$/mmbtu)	Hydrogen Domestic (\$/mmbtu)	Hydrogen Imported (\$/mmbtu)
2026			
2027			
2028			
2029			
2030			

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1 **Request IR-4:**

2
3 **RE: Roadmap Item 8**

4
5 **Regarding the additional data needed for further assessment of the potential for geothermal**
6 **generation,**

7
8 **(a) Please confirm that the discussions with geothermal developers indicated that they**
9 **would be looking to Nova Scotia (or some other entity with an interest in Nova Scotia)**
10 **to produce the data. In other words, developers are not likely to prospect for**
11 **opportunities absent further investment on behalf of Nova Scotia by some entity.**

12
13 **(b) Is NS Power aware of any government agency or any other entity that is not in the**
14 **energy business (e.g., a utility, developer, etc.) that would be a good candidate to fund**
15 **the work referenced in part (a)?**

16
17 **(c) Has or will NS Power recommend to any potential funder that this work be**
18 **undertaken? If so, how and on what timeline? If not, why not?**

19
20 **Response IR-4:**

21
22 **(a) In the discussions with NS Power, the geothermal developers did not indicate the intent to**
23 **procure data themselves or to prospect in the absence of additional geothermal data**
24 **procurement in Nova Scotia.**

25
26 **(b) No.**

27
28 **(c) No, NS Power would not recommend that a potential funder undertake this work at this**
29 **time, as geothermal power to support grid scale electricity was not selected in the**
30 **Evergreen IRP, and the conversations with developers to date have indicated the NS**

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

- 1 geology is either not suitable for the technology or the technology would be required at
2 depths in Nova Scotia that have not yet been piloted.

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Request IR-5:

RE: Action Plan Item 3

(a) Please provide an update on the status of the fast-acting generation capacity.

(b) What is the role of the NSIESO in planning and procuring the fast-acting generation resources?

(c) Is the fast-acting generation capacity delayed from NS Power’s original schedule? If so, is this due in any respect to the process of “standing up” the NSIESO?

(d) It has been reported that contracts for new gas-fueled combustion turbines involve longer-than-typical delivery periods.

(i) What is NS Power’s assessment of the market?

(ii) Does NS Power have access to pricing and delivery schedules that are better than the typical generation equipment market participant?

(iii) Have these changes, if confirmed by NS Power, been included in any updated modeling by NS Power? If so, please provide that information.

(e) Is NS Power re-evaluating the relative investment (units, capacity, or dollars) in batteries (BESS) vs fast-acting generation to any extent? If so, please provide a summary and any analysis that has been completed? If not, please explain briefly given the context provided by the responses to the previous parts of this question.

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

1 Response IR-5:

2
3 (a-c) Please refer to Section 3.2.7 in the 2025 10-Year System Outlook for an update on the
4 status and timing of the fast-acting generation capacity.¹

5
6 (d) NS Power has not pursued updates since the project was transferred in September of 2024,
7 as discussed in The Path to 2030 update 6.4² in M12012.

8
9 (e) NS Power is not currently re-evaluating the relative investment between various resources
10 for the elements required to meet the 2030 targets. Future evaluation of the resources
11 required beyond 2030 will be completed as part of the next IRP which will be conducted
12 by the NSIESO. It is important to note part of the value of fast acting generation is the firm
13 capacity provided to enable coal unit retirement.

¹ NS Power 2025 10 Year System Outlook report (M12386), July 14, 2025, p.22.

² NS Power 2025 ACE Plan (M12012), December 9, 2024, Appendix H, p.35 of 54

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

Request IR-6:

Please provide an update on the status of dynamic line ratings and other grid-enhancing technologies. In your response, please indicate what role these technologies may play (and at what level of materiality) to achieving IRP action plan objectives.

Response IR-6:

The Dynamic Line Ratings Project is currently underway. A total of 129 sensors will be deployed across six critical transmission lines, specifically NB Import - L8001 and Cape Breton Export (CBX) - L6515, L7003, L7004, L7005, and L8004. Additionally, through the implementation of Ambient Adjusted Ratings technology, all other NS Power transmission lines will provide real-time transmission capacity data based on sensorless calculation of line ratings using weather data and wind inputs. The data from both solutions will be integrated into the NS Power SCADA System and presented to System Operators to assist with dispatch. These projects are currently expected to be completed by the end of 2025.

The Dynamic Line Ratings Project and the Ambient Adjusted Ratings Project will identify additional transmission capacity which would otherwise be unavailable to System Operators due to static transmission limits representing conservative assumptions.

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

Request IR-7:

The Consumer Advocate would be interested in an update on the relative rate impact comparison (2020 IRP Report, Figure 52). For example, a comparison of the most relevant scenario reported in the 2020 IRP to NS Power's current forecast – recognizing that the components of the resource plan have shifted in type and schedule to some extent, and that there have been significant policy changes in the intervening years. It would be of interest to understand whether those changes are likely to result in significant changes in "pressure on rates."

Understanding that NS Power may not be able to produce such an analysis in a timely response to this information request, please explain:

- (a) Whether NS Power agrees that such an analysis would be useful and appropriate;
- (b) How long NS Power believes such an analysis would take to complete and submit for review; and
- (c) Whether NS Power requires Board direction to initiate such an analysis and, if not, how it will commit to completing and submitting such an analysis (including possible stakeholder engagement after further scoping).

Response IR-7:

- (a-c) NS Power anticipates the next general rate application (GRA) will be filed during 2025. This will provide an indication of the near-term impact on rates that will reflect components of The Path to 2030 resource plan. In addition, once operational, the NSIESO will complete an updated IRP. Any comparative rate assessments would be of more value based on the future updated resource plan outcomes (beyond 2030). For these reasons, NS Power will

2025 Evergreen IRP Action Plan and Roadmap Update (NSEB M12247)
NSPI Responses to Consumer Advocate Information Requests

NON-CONFIDENTIAL

1 not be undertaking an update to the relative rate impact comparison document from the
2 2020 IRP at this time.