



Blackburn Law Inc.

September 26, 2023

VIA EMAIL

Ms. Crystal Henwood
Regulatory Affairs Officer/Clerk
Nova Scotia Utility and Review Board
1601 Lower Water Street, 3rd Floor
Halifax NS B3J 3S3

Dear Ms. Henwood:

Re: M11307 – Nova Scotia Power Inc. – 2023 Evergreen IRP Action Plan and Roadmap Update

The SBA supports the Evergreen IRP process as an improvement in NSPI's long-term planning processes. Given the rapid evolution of a variety of policy, economic, and technological conditions, an increase frequency of updates to the IRP can lead to improved resource planning outcomes and lower costs to customers. The SBA believes that, as a first effort in the Evergreen IRP structure, NSPI has demonstrated a good balance of conducting enough analysis to provide improved insight on planning decisions without engaging in endless updates and analysis to capture all changing conditions and sensitivities.

The SBA has been an active participant in all discussions throughout the stakeholder process and has provided multiple rounds of comments. The SBA has reviewed the updated filing and in general, the SBA agrees with NSPI's priorities detailed in the Action Plan and Roadmap. The SBA offers the following specific comments to the Board and NSPI.

Renewable procurement approach should prioritize customer benefits

The updated IRP calls for significant near-term and long-term renewable resource additions. The SBA recognizes the importance of those resources to meet policy and planning requirements, and encourages NSPI to pursue a procurement approach designed to limit customer cost and risk. Many regions have recently seen rapid increases in renewable costs due to a variety of factors. This type of rapid change can result in higher costs to customers and potentially impact the financial viability of planned/contracted projects. There are some approaches that can protect ratepayer interests in such conditions, including scheduling regular, smaller procurements rather than large infrequent procurements to provide market certainty to bidders and level out short-term market volatility. Another potential measure is to include termination penalties in executed contracts to incentivize bidder commitments. NSPI should investigate best practices from other regions to ensure that its procurement approaches are well-suited for current market dynamics and balance economies of scale with customer protections.

Energy efficiency (EE) and demand response (DR) may be undervalued in NSPI analysis

As noted above, the updated IRP requires significant buildout of new resources and capital costs have been very volatile in recent years. EE and DR program costs are often more stable and predictable due to the more limited capital needs. In addition, accelerated development of these resources can help delay the need for new energy or capacity resources. Recent research from U.S. markets has demonstrated high value in DR and “virtual power plants” in decarbonizing resource portfolios. NSPI should consider a more expansive view of the benefits of such resources, and look for more opportunities to more fully integrate these resources as resource options in the IRP.

NSPI should continue to pursue all infrastructure options with long development timelines

The scenario analysis conducted by NSPI demonstrates that over the long-term, the NPVRR results are relatively close for resource plans with different approaches, such as the portfolios with and without the Atlantic Loop. Given the large degree of uncertainty around capital costs for both transmission and the various generation technologies, as well as policy uncertainty and potential for interregional collaboration, the SBA recommends that NSPI continue development activity on the infrastructure options, particularly those with long development timelines. For this reason, the SBA supports Item 1b of the Action Plan to continue coordination with other jurisdictions on the Atlantic Loop, while still planning to meet its resource needs even if the project is not ultimately viable.

Although the lowest-cost IRP portfolio did not include the Atlantic Loop, there are a variety of ways in which the economics of that investment could ultimately be more favorable over time. For instance, the Atlantic Loop scenario could be preferential if there is additional federal support, or if the project unlocks export markets that would reduce renewable curtailment, or if alternative supply options end up being more costly. Given the high degree of uncertainty, it is prudent to keep all options viable at this time so long as they are expected to produce benefits to Nova Scotia customers. However, NSPI’s ultimate obligation is to provide reliable electric service at the lowest possible cost to the province, so the planning process should ensure that this objective is achieved regardless of actions taken by other provinces or the federal government.

Regional collaboration can yield unquantified benefits

There are multiple future conditions that have not been modeled by NSPI in this analysis, including a future with significant offshore wind development consistent with the province’s May 2023 Offshore Wind Roadmap, and a future with significant hydrogen production or utilization. Some of those potential futures with significant infrastructure development could benefit from regional collaboration, either through new transmission like the Atlantic Loop, or other cost-sharing on infrastructure spending. NSPI should consider these issues in future planning analysis to provide an assessment of optionality of certain resource planning approaches.

Robust reliability analysis is required to confirm IRP conclusions

The SBA has previously provided comments on the importance of continuing NSPI’s analysis of system reliability with the growth in inverter-based resources. NSPI used some initial results as the basis for modeling constraints in this IRP analysis, but more analysis is needed to confirm how

different resource strategies (e.g. additional interties, higher electrification or demand response, etc.) will impact reliability and lead to need for synchronous condensers or other measures to ensure secure grid operation.

The SBA believes that the ongoing collaboration and feedback opportunity in this Evergreen IRP process has been incredibly helpful and helps assist all stakeholders in understanding how NSPI and its customers are going to transition to a new no-coal/net-zero electricity grid.

Yours truly,



E. A. Nelson Blackburn, K.C.
Small Business Advocate