

Our File: 100384
September 19, 2014

Ms. Nicole Godbout
Regulatory Counsel
Nova Scotia Power
P.O. Box 910
Halifax, NS B3J 2W5

Dear Ms. Godbout:

Re: Integrated Resource Plan (IRP) 2014 – Matter M05522/P-884.14

On September 12, 2014, Nova Scotia Power Inc. (“NSPI”) held a technical conference to present the Analysis Results for the 2014 IRP, which had been circulated to stakeholders on September 10, 2014.

The objective of the 2014 IRP (as noted on slide 5 of the Analysis Results presentation) includes developing “...an Action Plan describing the major tasks required to implement a no regrets strategy that aligns with the Preferred Resource Plan during the first five years of the planning horizon.” The development of an appropriate near-term Action Plan is a critical part of the IRP process, and NSPI has outlined several proposed Draft Action Plan Items at slides 19 to 21 of the Analysis Results.

Please accept the following comments on behalf of Port Hawkesbury Paper LP (“PHP”) with respect to the Analysis Results and, more specifically, the Action Plan that should be included in the final IRP report.

Demand Side Management

NSPI’s Draft Action Plan references the 3 year plan that will be developed with Efficiency Nova Scotia Corporation (“ENSC”) and stakeholders and submitted to the Board for approval for the 2016-2018 time period, but it does not provide any comments regarding the target level of DSM savings that should be pursued as part of this plan. In fact, in other sections of the Analysis Results, NSPI appears to suggest that the Analysis Results demonstrate that a level of DSM below the Base Case should be considered. For example, in Slide 11, NSPI observes that a “variable DSM spending profile [with lower spending in the near term] has the potential to lower near term rate pressure while being competitive on a planning period NPV basis.”

PHP does not agree that the Analysis Results support any reduction in the pursuit of the demand and energy savings identified in the DSM Base Case. To the contrary, in PHP’s view, the Analysis Results emphasize the importance of working to ensure that, at a minimum, the Base Case DSM demand and energy savings are achieved in the near-term. The Analysis

Results are clear regarding the potential negative cost implications associated with failing to achieve the Base Level DSM targets in the near-term. The following points are notable in this regard:

- On Slide 27, NSPI provides the Net Present Values (“NPVs”) of the various scenarios. The Base Load Candidate Resource Plan with a DSM profile lower than the DSM Base Case (CRP 1-1 FGD) is significantly more expensive in the Planning and Study Periods than all of the DSM Base Case Plans in the Base Load scenario.
- On Slide 8, NSPI shows the incremental resources that are required in the various cases. The Base Case DSM Profile assumes that 156 MW of incremental DSM is acquired during the 2015-2020 time period, whereas CRP 1-1 FGD assumes only 62 MW of DSM would be added. This difference of 94 MW is significant, as any shortfall in DSM versus the Base Case may need to be met by more expensive capacity additions to supply the load on NSPI’s system in future.
- If there is a shortfall in obtaining incremental DSM resources in the 2015-2020 period, this could impact NSPI’s flexibility to meet its load, particularly in the High Load scenario, which already requires capacity additions prior to 2020 even assuming that the DSM Base Case is achieved (as shown in Slide 8). NSPI did not model a High Load / High DSM scenario to test whether higher levels of DSM than the Base Case would be economic, but PHP assumes that increased DSM spending could at least help alleviate the need for some of the capacity additions called for in the High Load / Base DSM scenario. Alternatively, lower DSM spending in the early years of the Planning Period would require even more capacity additions to be added in the near term in a High Load scenario.
- Since the Low DSM Case contemplates more significant capacity additions post-2020, it is likely to be the most sensitive to further load increases (as well as fuel price increases and environmental restrictions) above the Base forecast throughout the Planning Period. As a result, there appear to be increased risks associated with any plan that fails to achieve the Base DSM levels in the near term.

The IRP is a long-term planning exercise designed to help indicate which actions would be beneficial to pursue in the short-term over a broad range of reasonable future scenarios to ensure there are “no regrets”. The Analysis Results indicate that pursuit of the Base Case DSM is beneficial across a range of scenarios and the action most consistent with a “no regrets” approach. The Action Plan should prioritize the importance of the achievement of this level of DSM demand and energy savings, starting with the upcoming 3 year plan to be negotiated with ENSC and submitted to the Board for approval.

Demand Response

Under the Demand Side Management heading, NSPI’s Draft Action Plan also indicates that it will “pursue cost-effective Demand Response opportunities.” As discussed further below in the context of NSPI’s integration of its renewable resources, PHP believes that there are cost-effective opportunities to use its load as a resource as part of future Demand Response initiatives. The Draft Action Plan should specifically note that NSPI will continue to work with PHP to explore the opportunities that may be available to ensure that the potential value associated with the use of PHP’s load is considered as part of its evaluation of Demand Response options.

Integration of Renewable Resources

At Slide 48, NSPI notes that the Plexos Output Analysis shows that a "higher energy requirement is beneficial to integration of base quantity of wind generation with minimal curtailment and uneconomic exports of excess energy." At Slide 19, NSPI's Draft Action Plan indicates that it will continue to develop an understanding of the operational challenges associated with variable generation and it will report to the UARB on these challenges and the status of the need for flexible resources to integrate additional variable generation in the 10 Year System Outlook Report.

At the technical conference, NSPI agreed that it saw the use of PHP's load and the potential development of further energy storage solutions as potential resources that will assist in dealing with the challenges associated with the incorporation of variable generation in its system. In addition to the reporting requirements referenced in NSPI's Draft Action Plan, PHP submits that the Action Plan included in the Final IRP Report should specifically reference the fact that NSPI will continue to engage in discussions with PHP to explore any possibilities that may be available in terms of the flexible use of its load and storage capabilities, particularly in the near term prior to the implementation of the Maritime Link and the development of other potential resources that may involve more extended lead time.

Existing Thermal Resources

On Slide 20, NSPI highlights various reports and studies that it plans to conduct with respect to its thermal resources. The proposed Draft Action Plan indicates that NSPI will produce a report on best industry practices regarding sustaining capital within 24 months of the Final IRP Report. It also notes that it will study the economic potential of an FGD and analyze potential optimal capital spending plans for the existing thermal fleet, but no timeline is provided for these studies.

As NSPI observes at Slide 12, the Analysis Results suggest that a 60-year life retirement schedule for the coal fleet is the most economic over the Planning Period. At the technical conference, Synapse noted that more analysis needs to be done to confirm this finding. The issue of the future availability and optimal use of NSPI's coal units is a critical issue. Since the preliminary indications in the Analysis Results are that these units will be economic over the long-term, PHP believes that NSPI should prioritize its analysis of the requirements for sustaining capital, rather than wait another two years for the results of a report on best industry practices.

In this regard, PHP notes that Liberty's Audit in the Fuel Adjustment Mechanism process recommends that NSPI complete an optimization study to address the optimal way of running (or not running) the coal units on a day to day basis (Chapter VIII, Recommendation 1). Liberty also recommends that NSPI develop and implement an aggressive program to improve Trenton 5's performance based on recent challenges associated with the operation of that unit (Chapter VIII, Recommendation 6). The Action Plan in the Final IRP Report should emphasize the importance of ensuring that the appropriate cost effective capital investments will be made to ensure the continued economic performance of NSPI's solid fuel plants, in both the near and long term. The analysis should also be closely linked with the analysis done by NSPI's fuels department regarding the ongoing operation of these plants.

10 Year System Outlook Report

PHP notes that NSPI's intention is to report to the Board on the issue of variable generation integration as part of its current 10 Year System Outlook. NSPI is also proposing to use this report to update the Board on other issues such as the status of cost-effective regional market opportunities, current coal retirement forecasts, regional transmission integration opportunities, and NSPI's ongoing evaluation of the appropriate planning margin for the power system. PHP agrees with this approach, and suggests that as part of this process, stakeholders should also be provided with the opportunity to provide any comments they may have on the 10 Year System Outlook to the Board each year following NSPI's filing of the report. PHP submits that the Action Plan should highlight the proposed use of the 10 Year System Outlook as a reporting document and also recommend that stakeholders be given an opportunity to provide their views to the Board as part of that process.

Ongoing Analysis and Future IRPs

As noted at the technical conference, the NPVs of many of the Candidate Resource Plans that were actually modeled are very similar for the Planning Period. As part of NSPI's ongoing long-term planning analysis and as part of future IRP processes, PHP believes it would be useful to study a wider variety of options with greater differentiation. This would allow NSPI and stakeholders to fully test the resilience of different plans in more detail. For example, high load scenarios matched with high demand side management, or high emissions reduction scenarios matched with high gas and coal prices would provide useful information regarding the most cost effective approaches across a range of reasonable scenarios.

We look forward to receiving the Draft Final IRP Report on September 30 so that we can provide further comments.

Yours truly,



James MacDuff

cc: Interested Parties

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