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Delivered by E-mail – nicole.godbout@nspower.ca

Nicole Godbout, Regulatory Counsel
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Dear Ms. Godbout:

Re: M05522 Integrated Resource Plan (IRP) – Submissions on Draft Final Report

This letter is submitted on behalf of the Industrial Group with respect to the draft NSPI 2014 IRP Report to the Utility and Review Board. In addition to reviewing the draft Report, we have had the opportunity to review the Memorandum filed by Rick Hornby and the Commentary filed by Synapse on October 3, 2014. The Industrial Group has actively participated throughout the IRP process and we appreciate this opportunity to make submissions on the draft IRP Report in advance of it being filed with the Board on October 15.

Following the third technical conference, in the time available, the Industrial Group reviewed the CRP analysis and provided feedback on September 19, 2014 on the scope of analysis, relative weighting to be assigned to the factors to select the "preferred plan" and comments on the proposed "Action Plan". As the draft Final Report is reflective of the information and feedback that has been provided throughout the IRP process, our submissions on issues that the Industrial Group has previously commented on will be limited.

"No Regrets"

The draft Final Report (p.17) explains that CRPs 1, 2 and 5 have similar "no regrets" paths for the first five years and have minimal incremental capital investment. Instead of choosing a single "Preferred Plan" NSPI intends to follow this shared path over the next five years. During this time, the Action Plan items will be addressed and there will be additional information and resources available to guide future IRP decisions. The Industrial Group supports NSPI's "no regrets" approach as it focuses on the CRPs which yield the lowest costs out to 2020 – assuming that this does not foreclose least-cost options to be reviewed in the next IRP update.

Section 6.3 of the Report outlines the Strategic Plan Decision Paths, listing "triggers" that would cause NSPI to alter the planning path and the CRP that would be considered if the "trigger" occurred. It is helpful to identify these "triggers" but the draft Report does not explain how and when NSPI will recognize when those triggers have occurred or are projected to occur.

The Industrial Group requests that in the Final Report NSPI define on a quantitative basis the circumstances which would trigger the Company to alter the planning path (i.e. how to define low or high DSM performance or higher sustained load growth), what process NSPI will undertake to evaluate planning changes and how and when these evaluations will be communicated to stakeholders.

Demand Side Management (DSM)

Through this IRP process, it has become apparent that the level of DSM selected will be one of the key factors that shape the long-term effects of planning decisions. Indeed, the input that separates CRPs 1, 2 and 5 are the levels of DSM. Despite the importance that DSM plays in NSPI's current resource planning, the modelling of DSM has not allowed for optimization.

- Each CRP was assigned one of three DSM amounts (base, high and half-base) which would be applied throughout the planning period. There was no opportunity to model variable DSM that could be optimized over the planning period – choosing the level that is most cost-effective from year-to-year.

- The cost of DSM ($/MWh removed) was limited to the cost established in the 2014 DSM Potential Study that was prepared by ENSC and Navigant. NSPI did not test sensitivities or analyze the impact of higher or lower $/MWh DSM costs.

- The IRP process also did not produce an avoided cost analysis of DSM; instead, this has been included in the Action Plan agenda. This, again, reduces the level of understanding that is available through the IRP Final Report.

The Industrial Group appreciates that the Action Plan includes additional DSM-related modelling (p. 19) and notes NSPI's view that variable DSM or a range of DSM may be appropriate for planning purposes (as opposed to a locked-in annual DSM goal). An opportunity was, however, missed to develop a more nuanced understanding of the impact of DSM and DSM costs on NSPI's resource planning through optimization.

With regard to the appropriate level of DSM (and its correlative budget), NSPI has indicated that the process required under the newly introduced *Electricity Efficiency and Conservation Restructuring (2014) Act,* which requires that NSPI contract with the government's franchise holder for efficiency and conservation programs, is the regulatory process through which to "*determine the cost-effective, affordable level of DSM*" (p.18).

Accordingly, item 6.2.1 of the draft Final Report (Action Plan: Demand Side Management Actions) includes as its first item: "*Engage with ENSC and stakeholders to develop a 3 year [DSM] plan and file for UARB approval: first half of 2015.*"

The Industrial Group sees this Action Plan item as bringing IRP-related discussions into the negotiating process between ENSC and NSPI. The Industrial Group would have preferred to have the opportunity to evaluate an optimal amount of DSM and a maximum cost for that DSM tested through the IRP process. It is understandable that NSPI would not wish to be perceived as pre-judging the outcome of negotiations. Nonetheless, the IRP is directional and not binding on the parties negotiating for the purchase and sale of efficiency. Had the analysis been done in the IRP, NSPI and ENSC, as well as ratepayers and the Board who will ultimately evaluate the prudency of the purchase, would have had the benefit of foresight guidance from the IRP results.

Now it appears that there will be no optimization of DSM in the IRP Final Report and all further refinements of DSM will be done (if at all) through the Action Plan. Ultimately, it appears that in order for stakeholders to engage in the optimization of DSM for planning purposes, they will have to contribute to the development of the 2016-2018 DSM plan and joint application.

Stakeholders are not involved in NSPI's resource contracting processes (apart from intervening in the ACE and other capital applications and the FAM Audit). The process suggested by NSPI appears to bring stakeholders into a position that could impact their future ability to challenge NSPI's prudence in entering into DSM contracts with ENSC.

If DSM cannot be optimized prior to completing the Final Report and must be addressed through the Action Plan, the Industrial Group requests that future discussions of DSM between NSPI, ENSC and stakeholders take place outside of the negotiating / joint application process that is required by the *Electricity Efficiency and Conservation Restructuring (2014) Act.*

Overall, the Industrial Group supports NSPI's focus on affordability and supports choosing a level of DSM that is consistent with this goal. However, we feel that there was an opportunity missed in the IRP process to optimize DSM and determine the lowest cost at which the right amount of DSM could be procured.

Optimization of Sustaining Capital Costs and Thermal Plant Retirements

The Industrial Group notes that this is the first IRP to include sustaining capital that varies with thermal plant retirement options, although these variables were inputs and were not optimized through modelling. As noted at page 14 of the draft Report, sustaining costs for the early, base and max retirement assumptions were calculated outside of Strategist and were added as an input to the CRP models.

The Synapse Commentary noted that sustaining capital costs and thermal plant retirements could be optimized to reduce the planning reserve margin towards levels closer to the required planning reserve margin, compared to those levels seen in Figure 3 of the Commentary (p. 5). It was suggested that this would improve the NPV in the planning period of certain CRPs as compared to others.

It is expected that optimizing thermal plant retirements and, in doing so, sustaining capital costs, would result in CRPs that are more precise with respect to the long-term NPV of different CRP options. The Industrial Group requests that such optimization should be included in the Action Plan.

Maritime Link

It appears that NSPI is concerned that the combination of potential industrial load loss and "suboptimal investment" in DSM *"poses a challenge with taking advantage of Maritime Link energy"* in addition to showing higher amounts of wind energy curtailment and uneconomic exports. NSPI concludes that *"Investment in wind resources and DSM programs will have to be designed not to exert further downward pressure on low load periods and not to compete with Maritime Link surplus energy utilization and with each other.* (p. 71-73)

At several instances in the IRP process, the Industrial Group raised the issue of modelling for different variables in the Maritime Link – such as delayed completion of the project or low energy output. NSPI declined to test these sensitivities. In fact, there has been very little mention of the Maritime Link in the IRP process, apart from establishing one option for Maritime Link imported power: 153 MW firm (Base Block) and up to 198 MW non-firm (Supplemental Block).

The Board found that the Maritime Link was the lowest long-term cost alternative for RES compliant supply to Nova Scotia, only if customers have access to market-priced energy in the Supplemental Block. If the CRPs are demonstrating that certain plans create challenges to using the Supplemental Block, the economics of the Maritime Link would be called into question. Unfortunately, these issues were not particularly well-noted prior to the draft Final Report; the Industrial Group would have appreciated the opportunity to explore the impacts of uneconomic use of the Link at an earlier point in the IRP process.

Timing of Analysis Results and Draft Final Report

The Industrial Group understands that this process has required NSPI to undertake many different analyses and compile extensive information. We appreciate the effort to distil and present the analysis in understandable, comparable formats. However, we repeat our earlier concern that the time allotted to understanding and addressing the different CRPs has been inadequate for true stakeholder participation.

The Analysis Results caused many stakeholders to ask questions, request additional information and to propose alternative approaches to planning. NSPI has included certain requests in the Action Plan, but few, if any, were incorporated into the draft Final Report. Consequently, we are left with a Final Report that does not feel sufficiently final. While additional time to address stakeholder requests and concerns may not have allowed NSPI choose a "Preferred Plan," (nor may it wished to), it may have allowed the Company to refine the range of preferred CRPs and would have allowed stakeholders to feel that their input into the process was meaningfully addressed prior to submission of a Final Report.

Thank you for the opportunity to submit these comments and we look forward to the Final Report and implementation of the Action Plan.

Yours truly,

Nancy G. Rubin

Maggie Stewart

NGR/MAS/lmc

cc IRP Stakeholders