

Mila Milojevic
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Nova Scotia Power Inc
Delivered via email to mila.milojevic@nspower.ca

14 February 2020

Re: Letter of Comment Regarding Current IRP's Input Assumptions

Dear Mila,

The Alternative Resource Energy Authority (AREA) would like to thank NSPI for soliciting feedback on its input assumptions for the integrated resource plan (IRP). We offer the following written comments to (i) complement our verbal input during the in-person sessions, (ii) restate some items we feel remain unaddressed and (iii) to provide our perspective on IRP work that NSPI has alluded to using to alter rates utilized by our organization and our affiliates.

Thank you for confirming that NSPI understands that local developers believe that wind and solar facilities can be constructed for prices lower than the estimates proposed for the base case. It is our understanding that NSPI believes that publicly available reports cannot confirm the estimates provided by local stakeholders. While we welcome NSPI's inclusion of the local construction estimates as a "low cost of renewables case", we continue to feel that this designation leads the reader to believe that such a scenario has a lower probability of occurring. If NSPI can clearly state in future reports that local developers strongly believe that the "low cost of renewables" scenario prices are easily achievable, AREA will accept the way NSPI proposes to advance. AREA also believes that the provided documentation does not indicate at what project size the costing is associated, which would be helpful to the reader.

AREA continues to stress that we believe the process provides no consideration for lower-cost, non-NSPI financing. We note that NSPI lists this AREA-identified issue in prior materials submitted by NSPI to the NS Utility and Review Board, but we can only find assumptions related to NSPI's financing costs in the updated documentation for which you seek comments by 14 February 2020. Therefore, AREA believes NSPI has not fully incorporated our request to study alternative, lower costs of capital and if the use of such enables Nova Scotia to decarbonize quicker than using NSPI's ownership assumptions.

Paul Chernick, President of Resource Insight and representing the Consumer Advocate, in his email dated 7 February 2020 highlights important and germane issues associated with NSPI's inequitable treatment of renewable generation's ELCC relative to conventional generation. AREA supports the process to seek answers to Mr. Chernick's rightly identified issues, which should conclude before the scenario modelling commences.

AREA believes that ratepayers would realize financial benefit from NSPI exceeding targets and selling surplus environmental attributes into various markets or other sectors of the local economy. Specific to Nova Scotia and as one example, NSPI could enable the Province to achieve overall carbon reduction targets because decarbonization efforts are more cost effective in the electricity sector than in the transportation sector. Therefore, it is likely that the transportation sector could purchase environmental attributes from NSPI at prices cheaper than it could otherwise and such additional revenue streams could benefit NSPI ratepayers. AREA staff proposed this concept during the latest inperson meeting but we believe it was confused with the concept of calculating the cost of carbon in scenarios that focus only on NSPI's constraints. AREA requests that NSPI consider modelling additional decarbonization efforts in each scenario and at what price other sectors would need to pay NSPI to affect such additional decarbonization.



With respect to IRP work that NSPI has alluded to using to alter various rates, Page 49 of Nova Scotia Power's 2020 IRP Assumption Set states the following:

- The information from the Planning Reserve Margin and Capacity Value Study undertaken by E3 as part of the 'Pre-IRP' work will be used as the basis for the ELCC assumptions.
- Dispatch-limited resources like wind, solar, storage, and demand response can contribute effective load carrying capability (ELCC) toward meeting the planning reserve margin requirement, but have diminishing returns as additional capacity is added to the system to maintain reliability.
- The calculations of the ELCC for the portfolio of dispatch-limited resources are included in the full E3 Study provided with the Pre-IRP Report.

And Page 50 of the Assumption Set states:

The average ELCC of the 596 MW of wind currently installed on the NSPI system is 19% or 111 MW. The ELCC value of adding new wind to the NSPI system is measured by the marginal ELCC and is currently at 11%, meaning that each additional MW of wind contributes 0.11 MW of firm capacity to PRM requirements.

In its recent 2020 Annually Adjusted Rates Application filed with the Nova Scotia Utility and Review Board on October 22, 2019, Nova Scotia Power stated at Pages 16 and 17 as follows:

"As in previous years, NS Power proposes to continue to use 32 percent capacity contribution factor for wind generation for the billing purposes in 2020. This factor has been approved for use by the Board in 2009 on the basis of the then used premise by NS Power that the capacity factor of wind generation represented a proxy for its contribution to the system peak. NS Power has revisited its methodology since then in favor of a statistically measured direct contribution of wind generation to the system peak. As a result, the capacity contribution of wind generation used by NS Power's generation planning was lowered to 17 percent for its existing wind resources, both ERIS and NRIS. NS Power has recently completed a pre-Integrated Resource Planning Capacity Study concerned with calculation of the Effective Load Carrying Capability (ELCC) of wind and other renewable energy generators, both for the existing and potential new wind resources. Once 2020 IRP process is completed, NS Power will revisit justification for the continued applicability of the 32 percent capacity contribution factor for BUTU billing purposes."

We wish to specifically note that the 2020 IRP process is not the appropriate avenue for consideration of the applicable value to be used in the Back-Up/Top-Up (BUTU) Tariff, as the IRP is a generic planning process rather than a rate design process. Regardless of what capacity contribution of wind generation for Nova Scotia Power's overall generation



planning is utilized in the IRP process this should not be considered the appropriate figure to be used for the BUTU Tariff which is designed for a specific purpose and tied to specific non-Nova Scotia Power generation facilities.

We wish to make it clear that we will not be addressing matters directly related to the BUTU Tariff as part of the IRP process nor do we see the IRP process as the appropriate venue for consideration of such issues.

Thank you for considering our input.

Regards,

Aaron Long

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Director of Business Services

Cc:

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