

Stakeholder Comment Matrix – August 7, 2019

Energy Storage Roadmap



Date of Request for Comment: <u>August 7, 2019</u> Period of Consultation: <u>August 7, 2019</u> through <u>September 6, 2019</u> Comments From: <u>Solas Energy Consulting Inc. on behalf of CanSIA with contribution from Nexus (CanSIA/CanWEA members)</u> Date [yyyy/mm/dd]: <u>2019/09/06</u>	Contact: <u>Leonard Olien</u> Phone: <u>403-200-0049</u> Email: <u>lolien@solasenergyconsulting.com</u>
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Question	Answer
<p>After reviewing the Energy Storage Roadmap, do you have any comments or feedback? Have you identified specific gaps, and if so what are they?</p>	<p>Nexus is a strategic project founded by Canadian Solar Industries Association (CanSIA) and operating in collaboration with Canadian Wind Energy Association (CanWEA) that focuses on the customer adoption of energy management technologies and enabling broader uptake of renewable energy. CanSIA and CanWEA consulted Nexus members with respect to the development of this submission.</p> <p>CanSIA and CanWEA applaud the AESO efforts in compiling the Energy Storage Roadmap. CanSIA and CanWEA appreciate that the AESO is approaching the issues in an integrated basis to reduce barriers to energy storage participation in Energy and ancillary service (AS) markets.</p> <p>CanSIA and CanWEA are interested in the consideration of hybrid resources in addition to stand-alone storage facilities. The combination of technologies at a single location is being considered by many market participants. This includes the potential of co-located generation, storage and load behind the same meter. Recognizing storage as a unique technology category is a significant improvement to the existing situation, however, CanSIA and CanWEA encourage the AESO to keep in mind a broader perspective. It will be more effective and efficient to include full and detailed consideration of hybrid assets in all Roadmap activities at this time rather than having to repeat the process again in the future.</p> <p>CanSIA and CanWEA are requesting clarity on the timeline for updates to the AESO Tariff. From Appendix 1, it appears that Tariff changes will not be implemented until after the AUC Tariff proceeding in 2022. CanSIA and CanWEA are concerned that three years of Tariff uncertainty will reduce investor interest in energy storage projects and impair their development. Further, CanSIA and CanWEA request clarity on the overlap among:</p> <ul style="list-style-type: none"> • the current Tariff application, • the ongoing Tariff Advisory Workgroup process, • AUC Distribution System Inquiry,

	<ul style="list-style-type: none"> • and the Storage Roadmap. <p>CanSIA and CanWEA request further emphasis on the process to improve collaboration between the AESO and DFOs. While CanSIA and CanWEA recognize that DFOs are independent organizations, consistency between the treatment of transmission and distribution connected energy storage projects is important for the fair and equal operation of the electricity market.</p>
<p>If working groups were appropriate, what are the one or two topics they should address?</p>	<p>CanSIA and CanWEA recommend the formation of workgroups to provide industry expertise to the development of the following short term items:</p> <ul style="list-style-type: none"> • Tariff • GUOC • Transmission deferral • Operating Reserve technical requirements • Hybrid asset participation requirements <p>In the longer term, workgroups will be helpful on the above items plus:</p> <ul style="list-style-type: none"> • Scope of studies • LTO and LTP modelling methodology • EMS and other software system changes that will be visible to market participants <p>Industry participants, including storage and renewable energy proponents, have spent considerable time and energy in consideration of these issues and the insights gained will prove very useful to the AESO in the short-term. Creating workgroups based on storage developers, renewable energy proponents and other stakeholders will reduce potential revisions in the long-term. Industry will also provide context for the impact of each of the items on hybrid assets.</p>
<p>Are you aware of any recent energy storage research/resources/information that would provide the AESO more insight on this topic? If yes, please provide or explain.</p>	<p>CanSIA and CanWEA requests that the term “intermittent generation”, as referred to the Storage Roadmap Report be replaced with the industry standard term “variable renewable generation.” This standard was set by NERC for referring to wind and solar electricity generation since 2009¹, as it more accurately reflects the nature of the technology. CanSIA and CanWEA request the AESO change their usage in the Roadmap Report and use the industry accepted language going forward.</p> <p>Alberta Innovates will soon release a paper that reviews the Greenhouse Gas implications of Energy Storage in Alberta.</p>

¹ Accommodating High Levels of Variable Generation, NERC, 2009, https://www.nerc.com/files/ivgtf_report_041609.pdf, PDF 21