

# Stakeholder Comment Matrix – Oct. 1, 2020

Request for Feedback on *Long-term Energy Storage Market Participation Options Paper*



<b>Period of Comment:</b> Oct. 1, 2020 through Oct. 30, 2020 <b>Comments From:</b> ENMAX Corporation <b>Date:</b> 2020/11/23	<b>Contact:</b> <b>Phone:</b> <b>Email:</b>
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**Instructions:**

1. Please fill out the section above as indicated.
2. Please respond to the questions below and provide your specific comments.
3. **Please submit one completed matrix per organization.**
4. Email your completed comment matrix to [energystorage@aeso.ca](mailto:energystorage@aeso.ca) by **Oct. 30, 2020**.

**The AESO is seeking comments from Stakeholders with regard to the following matters:**

	Questions	Stakeholder Comments
1.	Are there additional issues to energy storage market participation within the current ISO rules that AESO did not identify?	<p>While ENMAX is interested in the development of storage rules and remains an active investor in this technology, there are a number of legislative, market design and operational considerations that must be addressed before ENMAX is able to comment further on the specifics of energy storage market participation in Alberta. For instance:</p> <ul style="list-style-type: none"> <li>- The AUC’s Distribution System Inquiry recently concluded with a final report expected to be issued by the Commission by the end of the year. As the AESO is aware, energy storage was a main topic of discussion throughout the inquiry and in order to avoid duplication of work, the AUC’s report should be referenced to help guide and inform the AESO’s roadmap.</li> <li>- Clear policy direction from the Government is still required on the topic of self-supply and export, and the outcome will likely impact the rules for energy storage resources and the timelines for implementing certain activities in the AESO’s roadmap.</li> </ul> <p>ENMAX remains open to new opportunities where there is minimal disruption to the current framework (e.g., supportive of new products like fast frequency response). While ENMAX is not supportive of changes to the existing market design at this time, we encourage the AESO to continue imbedding flexibility throughout new and</p>

		existing ISO rules and technical requirements, where practical, in recognition of the evolving nature of storage technologies and the regulatory framework.
2.	Are there additional options to energy storage market participation within the current market structure that AESO did not identify?	In ENMAX's view there are some other options. Before exploring them, however, a number of interrelated topics still require further consideration or policy direction from the Government of Alberta. This complexity of interrelated issues was eluded to in the AESO's own documentation.
3.	Do you agree with the evaluation of options?	The options paper is a good starting point for industry to consider the long-term market participation of energy storage in Alberta. However, at this time, ENMAX neither agrees nor disagrees with the evaluations of the options for the reasons mentioned above.
4.	Is full range market participation an important priority for energy storage right now; or is half-range providing required market access? Should full range market participation be deferred for investigation and implementation at a future date?	<p>Given a number of important elements that require further consideration and/or policy direction, ENMAX is unable to comment in depth on the half-range and full-range options.</p> <p>While half-range may be a good first step, ENMAX is not supportive of expensive market design change discussions and AESO system changes. The market design should remain stable for the near term.</p> <p>Some ISO Rules may need to be adapted for Energy Storage but in general the approach to ISO rules and market design should remain technology agnostic (not just across storage technologies but across generation asset types that adhere to market rules) in order to preserve fairness and a level playing field in the Alberta market.</p>
5.	<p>Should Variable Energy Resources and Storage hybrids be permitted to participate?</p> <p>a. If no please explain why not</p> <p>b. If yes please provide a rationale as to why and how the dispatch variability issue should be addressed?</p>	<p>VERs and storage hybrids should be permitted to participate in the market subject to meeting both the relevant technical requirements and all legislative requirements—in particular those related to a fair, efficient, and openly competitive market. No market advantage can be conveyed to certain market participants through simpler participation requirements, less stringent ADVs, "easier" AORs, or any other failure to be technology agnostic. Should it be found that certain rules have to be "relaxed" to permit VERs and/or hybrids to participate, those relaxations must be applicable to other sources and sinks as well.</p>
6.	How should storage and potentially other demand side resources be required to participate in the energy market?	ENMAX is not able to choose one of these options over another at this time but would encourage the AESO to remain technology agnostic in order to preserve fairness and a level playing field in the Alberta market.

	<p>a. Must submit full range</p> <p>b. May submit full range</p> <p>c. Only submit discharge capability</p> <p>Please provide a rationale for your choice.</p>	
7.	<p>In regard to the full range market participation options, how do you feel the chosen option should land when trading off technology agnostic treatment and complexity against participation flexibility?</p>	<p>ENMAX agrees that “technology agnostic” is fundamental to a market-based approach. The preservation of a fair, efficient, and openly competitive market in which no participant receives unearned advantages is a legislative requirement. The need to comply with legislation, which in this context requires the rules to support a FEOC market and be technology agnostic, trumps both simplicity and flexibility. Flexibility is the next most important—provided it does not conflict with FEOC requirements—because it maximizes market participation. Participants in Alberta’s competitive electricity market ought to be capable of understanding and complying with rules that are complex, but this complexity must be out of a technical necessity.</p>
8.	<p>Do you have any comments on defining the state of charge? Is there anything the AESO has not considered? Please explain.</p>	<p>State of charge is simply the amount of “fuel” that is available to a battery energy storage system. All plants must manage its fuel and comply with ISO rules by declaring its capabilities through the Energy Trading System, operators of battery storage facilities ought to be able to do the same. Control of the asset’s state of charge should reside with the market participant /asset owner just like any other generator. Of course this control may be transferred to the AESO under a contract for services of the storage assets similar to an OR product.</p>
9.	<p>Do you have any comments on the commissioning requirements for storage? Is there anything the AESO has not considered? Please explain.</p>	<p>As the AESO notes, the commissioning rules will depend on the participation option ultimately chosen for energy storage. ENMAX is not yet able to comment on the commissioning approach but it should not differ that much from any other generator in verifying its range of technical capabilities.</p>
10.	<p>Do you have any concerns or suggestions on the energy storage market participation engagement process and timeline?</p>	<p>ENMAX appreciates the AESO’s engagement efforts to date and looks forward to future consultations on this subject.</p>
11.	<p>Do you have any other suggestions or comments you would like to share with the AESO related to the Long-term Energy Storage</p>	<p>The AESO states under the dispatchability objective and under the design principles that “The design should give the system controller the ability to monitor and control energy storage facilities in support of power delivery and balancing across the AIES.” ENMAX is concerned with the “control” aspect of this statement. In our view,</p>

<p>Market Participation Options Paper or the engagement activities?</p>	<p>once the AESO has established the necessary market rules and technical standards, it is up to each market participant to control its own facility and to comply with those rules and standards. The AESO may wish to expand on what they mean by “control”. Does the AESO consider that a facility’s state of charge should be managed by the ISO as this would not be in keeping with the market-based approach we understand as the objective? Or is the AESO contemplating buying contracts for asset control?</p> <p>The AESO may be confusing the role of an energy market participant with an energy storage asset with that of a non-wire solution that could potentially be thought of purely as a part of the grid. If it were on the Transmission system, the AESO may have some need to control it but not if it were part of the distribution system. From our understanding, the AESO is not being clear in this distinction.</p> <p>Any AESO developed DER and storage rules should not infringe on the DFO’s ability and obligation to continue managing their respective systems.</p>
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Thank you for your input. Please email your comments to: [energystorage@aeso.ca](mailto:energystorage@aeso.ca).