Stakeholder Comment Matrix - Oct. 1, 2020

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



Period of Comment:	Oct. 1, 2020 through Oct. 30, 2020	Contact:
Comments From:	TransCanada Energy Ltd. (TCE)	Phone:
Date:	[2020/10/30]	Email:

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 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?	Although not as urgent as those issues raised in its Options Paper, the AESO has yet to address the participation of energy storage as a transmission asset.
2.	Are there additional options to energy storage market participation within the current market structure that AESO did not identify?	Please see the response to #1 above.
3.	Do you agree with the evaluation of options?	There are certain evaluations that TCE does not agree with. Please see responses below for more detail.
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?	While full-range participation is important for the ancillary services market, TCE sees no immediate need for full-range participation in the energy market. As per TCE's comments below, half-range participation is the preferred form of participation for the energy market. If full-range participation for the energy market remains an option, its consideration should be deferred to a future date.



5.	Should Variable Energy Resources and Storage hybrids be permitted to participate? a. If no please explain why not b. If yes please provide a rationale as to why and how the dispatch variability issue should be addressed?	TCE anticipates that in many cases the primary motive to establish a hybrid asset would be to avoid unnecessary administrative charges (e.g., DTS charges and pool trading charges) when charging the battery from the variable energy resource. If these charges did not apply in this circumstance, there may be far fewer requests for the creation of hybrid assets, which may assuage the AESO's dispatch tolerance concerns. Of course, care would need to be taken to ensure the carbon credits from the variable energy resource are maintained.
6.	How should storage and potentially other demand side resources be required to participate in the energy market? a. Must submit full range b. May submit full range c. Only submit discharge capability Please provide a rationale for your choice.	At this point in time, TCE sees no need for full-range participation in the energy market. If parties demonstrate a reasonable need for full-range participation, TCE does not object facilitating this need at some future date. However, TCE would object to a "must submit full range" requirement as this would significantly and unnecessarily limit the flexibility of a storage asset during its charging phase. Because bids and offers must be submitted 2 hours prior to the start of the hour, full-range participation would not permit an energy storage asset to optimize its charging phase since it could not respond to changing conditions in the 2- to 3-hour period up until the end of the hour. This would increase costs and pool prices. A requirement for full-range participation also raises fairness issues as it contrasts to the AESO's treatment of other price-sensitive loads. With respect to evaluations, TCE questions the AESO's evaluation for the design principles "maximizes participation" and "dispatch-ability". TCE submits that under half-range participation, the charging phase of an energy storage asset is still participating in the energy market, although passively as a price-taker rather than as an active participant. Moreover, by limiting the ability of an asset to optimize its charging phase, full-range participation may act as a barrier to entry, thereby limiting participation. TCE understands the AESO's dispatch concerns with half-range participation. However, TCE submits that like other price-sensitive loads, the AESO should be able to reasonably predict at what pool price assets will be drawing energy from the system. Moreover, for those energy storage assets directly connected to the transmission system, the AESO should know their charging levels when issuing a dispatch in the energy market.



7.	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?	As stated above, TCE submits that the preferred option is half-range participation. To the extent that full-range participation is implemented, TCE recommends the linked assets approach for the primary reason that it minimizes complexity.
8.	Do you have any comments on defining the state of charge? Is there anything the AESO has not considered? Please explain.	TCE agrees that "state of charge" needs to be defined and that the definition will need to reflect Alberta's unique market structure. TCE will be able to provide more comments once the AESO proposes a specific definition.
9.	Do you have any comments on the commissioning requirements for storage? Is there anything the AESO has not considered? Please explain.	TCE has no comments at this time.
10.	Do you have any concerns or suggestions on the energy storage market participation engagement process and timeline?	TCE notes the implicit interconnections between this stakeholder process and the bulk and regional tariff stakeholder process. To the extent that the AESO has not already done so, TCE strongly encourages the AESO to establish an internal crossfunctional team that ensures the two processes work in tandem with each other so that comments and issues raised in one process are considered in the other.
11.	Do you have any other suggestions or comments you would like to share with the AESO related to the Long-term Energy Storage Market Participation Options Paper or the engagement activities?	No comment.

Thank you for your input. Please email your comments to: energystorage@aeso.ca.