

Period of Comment: March 1, 2021 through March 31, 2021	Contact: Mark Thompson
Comments From: TransCanada Energy Ltd. (TCE)	Phone: 403-589-7193
Date: 2021/03/30	Email: markj_thompson@tcenergy.com

Instructions:

1. Please fill out the section above as indicated.
2. Please respond to the questions below and provide your specific comments, if any. Blank boxes will be interpreted as favourable comments.

The AESO is seeking Stakeholder comments regarding the following questions related to the development of proposed amendments to ISO rules to enable energy storage (“Energy Storage ISO Rule Amendments”):

	Development of a Proposed ISO Rule	Stakeholder Comments
1.	Do you agree or disagree that the issue identified in the letter of notice requires the proposed Energy Storage ISO Rule Amendments? Why or why not? Please comment.	TCE agrees that the ISO Rules were not developed with the unique attributes of energy storage in mind and that certain rules need to be amended to allow for the optimal operation storage assets in Alberta and the efficient operation of the market.
2.	Do you agree or disagree with the potential purpose of the proposed Energy Storage ISO Rule Amendments? Why or why not? Please comment.	TCE agrees that stakeholder consultation for the development of energy storage rule amendments is necessary as this will help to ensure that potential issues are identified and managed appropriately.
3.	Do you agree or disagree with the proposed consultation activities? Why or why not? Please comment.	TCE agrees that at this point it is appropriate for the AESO to propose a flexible consultation approach at this time. TCE recommends that the AESO develop a more detailed consultation approach once it has heard from stakeholders and proposes draft rule amendments.
4.	Do you have any comments in relation to the prioritization of the development of the proposed Energy Storage ISO Rule Amendments or the related timeline? Please comment.	
5.	Do you agree or disagree with the AESO's recommendation regarding hybrid asset participation? Why or why not? Please comment.	TCE supports the AESO's recommendation that allows for hybrid configurations that uses the variable energy block mechanism. This would provide the necessary flexibility for certain storage technologies to efficiently participate in the Alberta electricity market. The variable energy block mechanism provides hybrid configurations a relatively easy way to communicate the variable components of its offers to the AESO.
6.	Do you agree or disagree with the AESO's recommendation regarding full-range participation? Why or why not? Please comment.	<p>TCE agrees that full-range participation should be optional. As stated in our October 30, 2020 comments, mandatory full-range participation would significantly and unnecessarily limit the flexibility of a storage asset during its charging phase. Allowing for half-range participation in the energy market is key for the efficient operation of storage assets. If participating full-range, TCE agrees that the linked asset approach is appropriate as it minimizes complexity.</p> <p>At this point in time, a requirement to communicate charging levels to the AESO for half-range participants seems reasonable. However, the communication of charging levels must not be onerous for the market participant and must be treated as confidential information similar to the treatment of other loads within Alberta.</p>

	Development of a Proposed ISO Rule	Stakeholder Comments
7.	Do you agree or disagree with the AESO's recommendation regarding energy storage state of charge requirements? Why or why not? Please comment.	TCE agrees that a storage asset's state of charge should be determined by the market participant subject to an approved definition and that this information should be treated as confidential.
8.	Do you agree or disagree with the AESO's recommendation regarding energy storage commissioning requirements? Why or why not? Please comment.	TCE supports the AESO's recommendation that storage assets submit 2 offer blocks during commissioning for inflow and outflows at the respective price collars.
9.	Do you have any additional comments?	TCE has no further comments at this time.