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| Period of Comment: March 1, 2021 through March 31, 2021 | Contact: Horst Klinkenberg |
| Comments From: Suncor Energy Inc | Phone: (403) 819-7125 |
| Date: 2021/03/31 | Email: hklinkenberg@suncor.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 |
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| 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. | Suncor agrees that the identified issues requires rule amendments. It is not clear yet whether those must be the proposed amendments or if alternatives are possible and desirable. |
| 2. | Do you agree or disagree with the potential purpose of the proposed Energy Storage ISO Rule Amendments? Why or why not? Please comment. | Suncor agrees with the stated purpose. As a new technology it is worth considering how market participation rules that were developed to accommodate other technologies should evolve. |
| 3. | Do you agree or disagree with the proposed consultation activities? Why or why not? Please comment. | Suncor is supportive of the consultation process as outlined so far. |
| 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. | Suncor supports the development of the proposed Energy Storage ISO Rule Amendments to add clarity for this class of asset. |
| 5. | Do you agree or disagree with the AESO's recommendation regarding hybrid asset participation? Why or why not? Please comment. | <p>Suncor disagrees with the recommendation. In Suncor's view, the appropriate solution is to disallow hybrid asset but to <i>settle</i> the co-located storage and VER technologies on a net basis.</p> <p>On their own both VER and storage already require special rule treatment to integrate them in a fair, efficient and openly competitive manner. By allowing these technologies to combine, the <i>uniqueness</i> and the permutations that need to be considered increase, making it ever more difficult to integrate these units while maintaining a level playing field.</p> <p>Suncor doesn't believe there to be any harm or efficiency loss from this arrangement as only the virtual market participation layer is affected and not settlement.</p> |

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| 6. | Do you agree or disagree with the AESO's recommendation regarding full-range participation? Why or why not? Please comment. | <p>Suncor disagrees with the recommendation. In Suncor's view, the appropriate solution is to mandate full range participation using either the Absolute Zero or B-Offer methodology; which methodology is ultimately chosen, and its details, should be determined through further consultation.</p> <p>The load component of a storage asset is not like any other load in the market. It is not the byproduct of normal (economic) activity. Instead, the full range of a storage unit is used to actively participate in the electricity market. As it is the full range of a storage unit that actively participates in the market, the full range should also be treated analogous to other active market participants, which includes a must bid/offer / must comply requirement.</p> |
| 7. | Do you agree or disagree with the AESO's recommendation regarding energy storage state of charge requirements? Why or why not? Please comment. | Suncor agrees that some form of charge state information would constitute useful information. At this point, Suncor cannot comment on whether the detailed recommendations under 3.3.5 are reasonable or appropriate. Suncor would like to inquire if the AESO will take measures to validate that the SOC telemetry would be reflective of actual equipment state. In addition, Suncor submits that at a minimum recommendation 4 requires further stakeholder consultation. |
| 8. | Do you agree or disagree with the AESO's recommendation regarding energy storage commissioning requirements? Why or why not? Please comment. | Suncor agrees with the recommendation to add commissioning requirements to accommodate the charge portion for energy storage. |
| 9. | Do you have any additional comments? | As rules for storage participation are developed, it is important to not only avoid unnecessary barriers to storage and to efficiently accommodate the unique technological limitations and capabilities but to also ensure that a level playing field among market participants is maintained. |