

Stakeholder Comment Matrix – May 13, 2021

Bulk and Regional Tariff Design Stakeholder Engagement Session 5B (DOS)



Period of Comment: May 13, 2021 through May 28, 2021	Contact: Justin Rangooni
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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 evaluation per organization.**
4. Email your completed comment matrix to tariffdesign@aeso.ca by **May 28, 2021**.

The AESO is seeking comments from Stakeholders on its DOS modernization recommendation. Please be as specific as possible with your responses. Thank you.

	Questions	Stakeholder Comments
1.	<p>Please comment on Session 5B hosted on May 20, 2021. Was the session valuable? Was there something the AESO could have done to make the session more helpful?</p>	<p>Energy Storage Canada (ESC) found the Session 5B valuable. The AESO appropriately provided an overview of the DOS rate, the modernization recommendations, provided responses to stakeholder comments and further details on the modernization recommendations.</p> <p>The session could have been more helpful if the AESO had provided insight and commentary on how DOS modernization recommendations linked with broader Alberta electricity market decisions. For example, including DOS in the energy merit order has impacts and interactions with the Alberta market design.</p>

<p>2. Are you supportive of the AESO's demand opportunity service (DOS) modernization recommendation? Why or why not?</p>	<p>ESC is encouraged that the AESO is proposing an opportunity service type for energy storage resources. A core function of energy storage resources is to seek opportunities to increase the utilization of the electricity system. Practically this means that energy storage will consume from the transmission system during hours when load customers use the system the least.</p> <p>There are a number of issues and outstanding clarifications that must be addressed before ESC can support the DOS modernization recommendations.</p> <ul style="list-style-type: none"> • During the 5B session the AESO stated an assumption that energy storage under the modernized DOS must retain a certain amount of capacity under DTS for charging “to ensure capacity is available to charge”. Energy storage participating under an opportunity rate must be willing to accept the risk that the transmission system may not have capacity available to allow the energy storage resource to charge. If energy storage resources require capacity to be available to charge (i.e., firm transmission service), then that energy storage resources should request DTS service for that capacity. The modernized DOS service should not arbitrarily mandate energy storage to reserve DTS capacity under an opportunity rate design. In previous sessions the AESO stated that they expect energy storage resource auxiliary service and/or station service should be covered under DTS rate. ESC agrees with this approach since this station service load is consistent and required to operate the energy storage system. The cycling of energy storage resources is performed for market opportunities and the cycling would not occur without unconstrained transmission system access. • The AESO has stated a concern of DTS cannibalization from DOS if a maximum annual load factor is not used. This approach may be appropriate for end-use customers but is not appropriate for energy storage resources. Energy storage will not cannibalize DTS since a requirement for firm capacity through DTS is a significant barrier to market participation in Alberta. In other words, without changes to bulk & regional rate design it is unlikely that significant energy storage facilities will be developed. AESO should be encouraging participation of energy storage since any payment through a DOS modernization rate would provide cost reduction for other customers. • The AESO has recommended a business case assessment to determine if a new connection can fairly use the opportunity service. The AESO admits that the business case application is subjective and increases the uncertainty of acceptability. The business case application for energy storage resources will be very similar regardless of technology type or market conditions.
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		<p>Assessing the business case each energy storage resource application is a barrier for energy storage development and unneeded administrative requirement. The AESO should provide a direct application path for energy storage resources recognizing that energy storage participation will not change and therefore has a common business case.</p> <p>ESC does support the following components of the DOS modernization recommendations</p> <ul style="list-style-type: none"> • Removal of the term limit for DOS rate which provides certainty to energy storage assets that could operate for 20+ years • The capability of energy storage resources to offer ancillary services under DOS rate • Retaining the technical assessment for connection; any resource connecting to the Alberta transmission system should be assessed to determine if there are any negative impacts on reliability or system stability.
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<p>3.</p>	<p>Are there considerations that the AESO should include, exclude and/or modify in its DOS modernization recommendation? Please specify and include your rationale.</p>	<ul style="list-style-type: none"> • The DOS modernization recommendations create a dispatchable DOS that would have market participants bid for their energy consumption under the DOS rate. ESC is not opposed to exploring participation of energy storage resources in the energy merit order as ESC recognizes the benefits to system operation for the AESO (e.g., full range participation). Participation in the energy merit order carries additional risks and costs for energy storage that does not appear to have been considered in the DOS modernization recommendations. • Further, there are many additional considerations with respect to including energy storage in the energy merit order that are beyond the bulk & regional tariff design. Inclusion in the energy merit order requires an immediate and prompt review and assessment of Alberta electricity market design by the AESO and stakeholders to determine how storage participation may influence market outcomes and objectives. • In many ways energy storage resources are similar to interties for import and export purposes. ESC is interested in exploring XOS rate participation with similar modernization updates as the DOS rate (i.e., indefinite term, energy merit order participation, technical assessment for connection, etc.). It is not clear to ESC if the XOS rate will increase similar to the DOS rate increase or whether there are other barriers for energy storage participation.
<p>4.</p>	<p>Do you have any additional implementation considerations for the DOS modernization the AESO should consider?</p>	<ul style="list-style-type: none"> • The preferred rate design proposed by the AESO shifts a significant amount of transmission system costs to load on an energy basis. This increase in energy basis should not apply to the opportunity rate. The opportunity rate does not get firm transmission and the system is not built for opportunity rate participants. The transmission costs that have been shifted to be functionalized on an energy basis should not be included in the DOS rate. The system is designed to allow the flow of in merit energy and not for the flow of opportunity rate energy. Only costs associated with the flow of DOS energy should be included and these are not transmission costs (other than losses and variable O&M) by definition.

	Questions	Stakeholder Comments
5.	Do you have additional clarifying questions that need to be answered to support your understanding?	See above discussion points
6.	Additional comments	None at this time.

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