

Stakeholder Comment Matrix – March 25, 2021

Bulk and Regional Tariff Design Stakeholder Engagement Session 5



Period of Comment: March 25, 2021 through April 15, 2021	Contact: Scott Perry
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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 **April 15, 2021**.

The AESO is seeking comments from Stakeholders on Session 5. Please be as specific as possible with your responses. Thank you.

	Questions	Stakeholder Comments
1.	Please comment on Session 5 hosted on March 25, 2021. Was the session valuable? Was there something the AESO could have done to make the session more helpful?	The session provided a valuable platform for stakeholders to pose questions and explore the AESO's tariff design proposal. We appreciate the opportunity to provide commentary and continued engagement.
2.	Please comment on Technical Information Session II hosted on March 31, 2021 (if you attended). Was the session valuable? Was there something the AESO could have done to make the session more helpful?	The session was valuable and allowed good dialogue between Market Participants and the AESO regarding rate impact.
3.	Are you supportive of the AESO's preferred rate design? Why or why not?	<p>Greengate is not supportive of the AESO's rate design for Bulk and Regional Charges. Greengate is supportive of using DOS rates for energy storage if the DOS rate and terms and conditions are appropriately modified.</p> <p>Although, it would be our preference to have a storage-specific tariff acknowledging the unique capabilities and value offered by energy storage, Greengate believes that an interruptible tariff is an improvement to rate DTS.</p> <p>At a high-level, Greengate supports the use of a modernized DOS tariff; however, this support is predicated on the assumption that elements of the existing DOS tariff are modified to facilitate fulsome market participation by energy storage assets.</p> <p>It is our understanding, from the rate sheet provided by the AESO, that Rate DOS charges will increase substantially under the proposed tariff structure. Greengate is concerned that the proposed DOS tariff rate will continue to render energy storage charging from the electricity grid as a broadly uneconomic activity, reducing the positive impact that energy storage could have for Alberta's load customers.</p>

	Questions	Stakeholder Comments
4.	<p>Do you believe the AESO's preferred rate design meets the AESO's rate design objectives? Why or why not?</p> <p>a) <u>Reflect Cost Responsibility</u> (Cost recovery is based on cost causation, reflecting how transmission customers use the existing grid*)</p> <p>b) <u>Efficient Price Signals</u> (Price signal to alter behavior to avoid future transmission build)</p> <p>c) <u>Minimal Disruption</u> (Customers that have responded to the 12-CP price signal and invested to reduce transmission costs are minimally disrupted)</p> <p>d) <u>Simplicity</u> (Simplicity and clear price signals while achieving design objectives)</p> <p>e) <u>Innovation and Flexibility</u> (ISO tariff provides optionality for transmission customers to innovate while not pushing costs to other customers)</p> <p>*AUC Decision 22942-D02-2019</p> <p>**Proposed rate design must fit within current legislation</p>	<p>No, Greengate does not believe that the AESO's preferred rate design meets the rate design objectives.</p> <p>Drastically increasing the energy charge will not lead to a tariff that properly reflects cost responsibility. Grid costs are mostly fixed in nature. Taking a fixed charge and collecting it from AESO customers on a variable cost/MWh basis does not properly reflect cost causation.</p> <p>The AESO constructs transmission facilities based upon an assessment of peak load. Collecting on a \$/MWh basis does not properly allocate costs to low load factor customers and is therefore not a rate that is based upon a cost causation principle.</p> <p>DOS rates are heavily influenced by the size of the energy charge. A drastic increase in DOS rates that is proposed by the AESO can only be justified if actual variable costs have increased. The AESO's proposed rate design arbitrarily increases the variable component of the AESO's tariff and therefore is not justified.</p>
5.	<p>Are there considerations that the AESO should include, exclude and/or modify in its preferred rate design to better achieve the AESO's rate design objectives? Please specify and include your rationale.</p>	<p>The AESO should collect fixed charges from its customers to reflect the fixed nature of transmission costs. Creating a variable cost from fixed charges does not properly reflect the fixed cost nature of transmission costs. The AESO's rates should be modified to properly reflect cost causation.</p>
6.	<p>Please describe any areas in which you are aligned with the AESO's preferred rate design.</p>	<p>N /A</p>
7.	<p>Are the assumptions the AESO used for the rate impact reasonable? Is there additional information that would help improve your understanding of rate impacts?</p>	<p>N /A</p>

<p>8. Are you supportive of the AESO's consideration of modernizing DOS, including its suitability for an energy storage charging capacity? Why or why not?</p> <p>And if so, provide your comments on the consideration of the AESO's DOS eligibility requirements, including for energy storage.</p>	<p>Greengate applauds the AESO's acknowledgement that the DTS rate, in its current form, does not support economic charging behaviour of energy storage from the AIES; and the subsequent consideration that non-firm rates could encourage participation of flexible market assets, such as energy storage.</p> <p>Overall, Greengate supports the use of a modernized DOS tariff; however, this support is predicated on the assumption that elements of the existing DOS tariff are modified to facilitate fulsome market participation by energy storage assets.</p> <p>Greengate supports the following eligibility criteria for DOS as listed on slide 74 of the March 25 stakeholder session presentation:</p> <ol style="list-style-type: none"> 1. "Use would not occur under any other rate". Rate DTS is economically destructive to energy storage participation in the energy wholesale energy market. Energy storage follows price signals to store electricity from the grid when it is economically prudent to do so (i.e. during instances of low Pool Prices). Adding the Rate DTS to the Pool Price renders energy storage asset participation broadly uneconomical. 2. "Must have alternative energy source or a "market opportunity" where the cost of receiving additional electric energy under Rate DTS renders the opportunity uneconomic." Investing in energy storage under Rate DTS renders projects broadly uneconomical. Firm electricity is required for the facility auxiliary loads and thus requires a relatively small Rate DTS contract. However, the incremental grid electricity consumption required to charge an energy storage asset is uneconomical under Rate DTS. <p>Greengate believes that the following DOS eligibility criteria, as listed on slide 74 of the March 25 stakeholder session presentation, require modification:</p> <ol style="list-style-type: none"> 1. "Sufficient transmission capacity." Ideally, energy storage would qualify for a storage-centric firm service rate, at a much lower tariff rate charge than the proposed Rate DTS and Rate DOS charges. It should be acknowledged that energy storage is capable of providing broad benefits to the Alberta electric system, and subsequently the users of that system (both load and generation). <p>Under the AESO's proposed tariff structure, if an energy storage asset elects to connect to the system, it is understood that Rate DTS contracts take precedence over those contracts for Rate DOS, which are interruptible. Therefore, an energy storage market participant that elects to construct a facility and connect under rate DOS should be permitted to do so using its own assessment of available transmission capacity which would be based upon a</p>
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		<p>grid study. The AESO should consider modifying this criterion in the modernized DOS tariff.</p> <p>2. "Is temporary or repeated short-term use." Most energy storage assets that qualify for the modernized Rate DOS will exclusively use Rate DOS for all charging energy purchased from the grid. This would remain the case unless an alternative rate structure is developed and instituted that better serves energy storage assets, such as a future Energy Storage-centric tariff.</p>
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<p>9. Please describe what components of the current DOS implementation (i.e., rate, terms, and conditions) limit the use of excess transmission capacity (i.e., capacity that would not otherwise be used under Rate DTS).</p> <p>How might those components of DOS be improved?</p>	<p>The following components of the current DOS implementation limit the use of excess transmission, particularly as relates to energy storage:</p> <ol style="list-style-type: none"> <p>Determination of Rate DOS Charges. The existing Rate DOS Charges are based on the “Energy” portion of the AESO Bulk and Regional Tariff. Slide 74 of the March 25 stakeholder session presentation illustrates that the “Energy” portion of the charge was \$2.18/MWh (based on the 2019 Test Year), but increases to \$10.19/MWh (based on the AESO preferred rate modelling for 2019). This is a 467% increase to this cost element, which happens to be a component for the cost basis for Rate DOS. The AESO’s latest tariff rate estimation, made available to stakeholders on April 13th, estimates that the DOS Rate will increase to \$15/MWh. This triples the DOS rate, and therefore triples the rate that applies to energy storage grid charging.</p> <p>Greengate is highly concerned that increases to the DOS 7-minute charge will prove cost prohibitive to energy storage participation in the Alberta electricity grid. Greengate also questions the cost causation basis of drastically increasing the energy charge in the Bulk and Regional tariff.</p> <p>Rate DOS Types. It is our understanding that the existing three Rate DOS Types (DOS 7 Minutes, DOS 1 Hour, DOS Term) were created to serve a certain set of load service considerations, such as temporary provision of excess grid electricity (beyond a proponent’s Rate DTS contract) during outage of a load customer’s onsite generation. The existing rate DOS types do not reflect the advanced operational capabilities of energy storage, including the ability to satisfy recall directive response times far shorter than 7 minutes.</p> <p>In modernizing DOS, Greengate recommends that the AESO considers implementing faster responding DOS types (i.e. DOS 1 Second, DOS 30 seconds, DOS 1 Minute).</p> <p>Take or Pay Provision. Energy storage assets will use Rate DOS for charging over the life of the installed asset. Therefore, as far as an energy storage asset is concerned, this is not a “temporary or repeated short-term use” case.</p> <p>Greengate requests that the take or pay provision does not apply to assets that satisfy the other eligibility requirements to participate in rate DOS.</p> <p>Eligibility – Economic. Energy storage assets will use Rate DOS for charging over the life of the installed asset. Therefore, as far as an energy storage</p>
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		asset is concerned, this is not a “temporary or repeated short-term use” case. The market participant can certainly indicate it would not increase metered demand under Rate DTS, if Rate DOS was not available, as this would be economically destructive to the energy storage asset.
10	Do you have any comments on the AESO’s targeted engagement approach for mitigation discussions?	Greengate elects to reserve commentary to the suggested energy storage tariff treatment.
11	<p>Are there further considerations that the AESO should include, exclude and/or modify in the mitigation option starting principles? Please specify and include your rationale.</p> <ol style="list-style-type: none"> 1. <u>Limit the rate impact for customers</u>: Mitigate rate impact to under 10 per cent increase to a party’s transmission bill for initial stage of transition 2. <u>Adapt with design and rates</u>: Ensure options are adaptable to changes to the proposed design and forecast rates 3. <u>Consistent application</u>: Mitigation options can be applied consistently across all impacted loads and not be individually defined 4. <u>Administrative simplicity</u>: Feasible to implement with current tools and systems 5. <u>Mutually acceptable</u>: Account for feedback from broad stakeholder group 	Greengate elects to reserve commentary to the suggested energy storage tariff treatment.
12	Based on the AESO’s mitigation options assessment, are there further considerations that the AESO needs to include, exclude and/or modify (e.g., temporary versus permanent)? Please specify and include your rationale.	Greengate elects to reserve commentary to the suggested energy storage tariff treatment.

13	<p>Are you in favour of some type of mitigation? Why or why not?</p> <p>If you are in favour of some type of mitigation, how would you assess whether a proposed mitigation approach is acceptable?</p>	<p>Greengate elects to reserve commentary to the suggested energy storage tariff treatment.</p>
14	<p>In your view, should the AESO provide participants with more flexibility to adjust contract capacity, specifically by way of a contract reset period with the implementation of new rates and/or a PILON waiver if the contract level has not changed in the previous five years?</p>	<p>Greengate elects to reserve commentary to the suggested energy storage tariff treatment.</p>
15	<p>Do you have any additional implementation considerations the AESO should consider?</p>	<p>Greengate would appreciate further discussions on the DOS rate design, prior to the AESO filing its tariff. To date the DOS concept has only been broadly discussed and a detailed rate sheet and terms and conditions have not been released. Greengate would appreciate an opportunity to comment on the DOS rate details as they become available.</p>
16	<p>Do you have additional clarifying questions that need to be answered to support your understanding?</p>	<p>Greengate is not following the logic of the AESO's proposed DOS rate sheet. A discussion on the DOS rate calculation would be appreciated.</p>
17	<p>Additional comments</p>	<p>Thank you for the opportunity to comment.</p>

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