

# Stakeholder Comment Matrix – March 25, 2021

## Bulk and Regional Tariff Design Stakeholder Engagement Session 5



<b>Period of Comment:</b> March 25, 2021 through April 15, 2021	<b>Contact:</b> Akira Yamamoto
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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](mailto: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
<p>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?</p>	<p><b>Yes, the session was valuable but releasing the data and analysis that NERA Economic Consulting (NERA) performed along with the presentation would have made the session more helpful.</b></p> <p>Session 5 was valuable as the AESO presented its preferred rate design during the session. The new approach is a significant change switching from the allocation of costs from bulk and regional system to a model that allocates based on demand and energy. The changes as a result of this allocation change were significant:</p> <ul style="list-style-type: none"> <li>• a coincident peak charge that is almost 40% smaller,</li> <li>• an energy charge that is 5 times greater; and</li> <li>• billing capacity is 30% smaller.</li> </ul> <p>The session focused on what the proposed changes were and walking through illustration of the perspective to NERA's approach of allocating costs to demand and energy based upon a minimum and actual system calculation. However, there was no accompanying analysis with system data that showed how these costs were allocated according to this minimum and actual system calculation.</p> <p>Even though the AESO posted additional material on April 13, 2021, including a more detailed explanation of the methodology used to classify transmission costs between demand and energy, we still have questions about this approach to splitting out costs. The methodology assumes that the "minimum system" is that required to meet peak load and therefore classifies all associated costs as demand related when regional peak load exceeds peak generation, while infrastructure beyond the minimum system is assumed to support the in-merit flow of energy and therefore deemed as being energy related.</p> <p>Furthermore, the analysis establishes these relationships using non-coincident peak demand and generation which we are concerned does not represent how these flows occur in real life and may not adequately represent how this data is used in transmission planning.</p> <p>TransAlta would like to see the peak load and peak generation data by region (as well as the total cost for each region) and the minimum and actual system estimates used in NERA's calculation. We would also like to see this information over time, which NERA has stated has changed minimally since 2015.</p> <p>While we appreciate the presentation and the billing estimator, given the dramatically different design being proposed stakeholders should be provided the analysis (and relevant data) that NERA performed so that they can be confident that the approach is a fair allocation of costs and consistent with the underlying data.</p>

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?	<p><b>Yes, the Bill Impact Tool and the sample site data were helpful. The AESO should develop a DOS Bill Impact Tool.</b></p> <p>TransAlta appreciates the efforts of the AESO to help stakeholders understand the impact of the change in rate design through the Bill Impact Tool. It was very helpful to have sample data provided to use in the Rate Tool.</p> <p>TransAlta recommends that the AESO provides a DOS Bill Impact Tool for energy storage providers that may be used to test the associated costs at various levels of recallability (less than 7 minutes) or priority (lowest priority versus the existing DOS rates priority). Notwithstanding the estimating rate calculation tool provided on April 13 includes estimated Rate DOS, we believe that it would be useful for energy storage providers to estimate their tariff costs under the various DOS service that the AESO is considering for energy storage and allow those providers to provide feedback about whether those costs are attractive for energy storage.</p>
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<p>3. Are you supportive of the AESO's preferred rate design? Why or why not?</p>	<p><b>TransAlta does not have enough information to determine whether the new allocation methodology is a fair and reasonable way to redesign the bulk and regional tariff rates.</b></p> <p>As stated above, we are concerned that the preferred rate design represents a significant change in cost allocation which should only be undertaken if there is sufficient evidence that it is better or otherwise correcting weaknesses in the existing design. While the session explained the new allocation methodology at a very high level and through simplified, illustrative examples, we were not provided any of the data or analysis that would establish that the concepts of a “minimum” system is fair and good approach.</p> <p>For example, a “minimum system” that estimates the transmission system required to meet peak load sounds like an engineering concept but the determination of what the “minimum system” is under the methodology is based upon peak load relative to peak generation. We are unsure whether this regional perspective is truly a fair representation of a “minimum system” at a system level. We ask the AESO to provide more historic data (pre-CTI and post-CTI) as that we can fully understand how this allocation methodology would change with bulk and regional system build outs.</p> <p>We have several questions about this new methodology that we wish the AESO to address:</p> <ul style="list-style-type: none"> <li>• Is generation adjusted to factor in the capacity factor of the resource or all installed MW accounted for in the same manner (e.g. 1 MW of solar is the same as 1 MW of gas)?</li> <li>• Installed generation capacity is typically greater than demand in order to ensure resource adequacy is met (generation capacity needs to provide a reserve margin). Doesn't this methodology therefore suggest that at a system level (where generation will be greater than demand) the transmission system is always in excess of the “minimum system”?</li> <li>• If a region has a retirement of a generating unit such that it becomes a region that imports power, does that translate into a reduction in the energy charge and an increase in demand charges? (Wouldn't a change in flows indicate greater use of the bulk system and be directionally misaligned with the change in energy charge?)</li> </ul>
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Questions	Stakeholder Comments
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<p>4. Do you believe the AESO's preferred rate design meets the AESO's rate design objectives? Why or why not?</p> <ul style="list-style-type: none"> <li>a) <u>Reflect Cost Responsibility</u> (Cost recovery is based on cost causation, reflecting how transmission customers use the existing grid*)</li> <li>b) <u>Efficient Price Signals</u> (Price signal to alter behavior to avoid future transmission build)</li> <li>c) <u>Minimal Disruption</u> (Customers that have responded to the 12-CP price signal and invested to reduce transmission costs are minimally disrupted)</li> <li>d) <u>Simplicity</u> (Simplicity and clear price signals while achieving design objectives)</li> <li>e) <u>Innovation and Flexibility</u> (ISO tariff provides optionality for transmission customers to innovate while not pushing costs to other customers)</li> </ul> <p>*AUC Decision 22942-D02-2019</p> <p>**Proposed rate design must fit within current legislation</p>	<p><u>Cost responsibility &amp; Efficient Price Signals</u></p> <p><b>Is allocating more costs to energy truly following cost causation?</b></p> <p>TransAlta has reservations about a design that would increase the costs associated with energy from 7% to 31% and increase the energy charge by 5 times its current level. We question whether so much of the bulk and regional system cost is truly caused by the amount of energy that a customer consumes. At &gt;\$10/MWh, the transmission charges will be higher than the energy price in some off-peak hours. We are concerned that such a high energy charge could drive conservation behavior when we should be providing a signal for greater use of the transmission system (i.e., during off-peak hours).</p> <p>Furthermore, the result of the preferred rate design is to shift a greater portion of wires costs from the fixed demand to the energy portion. This energy charge as proposed is intended to reflect the "additional transmission system required to facilitate the in-merit flow of energy". However, unlike a variable cost, the costs associated with the energy charge do not vary with energy usage. In a situation where there was a large build-out of generation outstripping demand, energy charges could increase even higher, signaling to customers to lower demand in a situation where the opposite is needed for cost recovery.</p> <p>It would also be helpful if the AESO explained how the adoption of new technologies - energy storage in particular - would affect the preferred rate design. For example, whether energy storage would be included in the rate calculations as supply or load in the allocation methodology.</p> <p><u>Minimal disruption &amp; Simplicity</u></p> <p>TransAlta supports a preferred rate design that is transparent, simple and fair to all customers. The design should be clear enough that a customer can understand how their behavior affects their transmission costs. TransAlta also supports the implementation of mechanisms that identify customers that are negatively affected by the new rate design and supports them in a transition to the new rates.</p> <p><u>Innovation &amp; Flexibility</u></p> <p>The preferred rate design does not include additional rate classes (such as interruptible, standby, or energy storage service rates), as communicated to the AUC with its April 30, 2018 motion and to stakeholders in Session #1. Instead, the AESO has suggested that DOS and DTS be applied to storage customers – essentially forcing new uses to fit the current design instead of the reverse.</p> <p>TransAlta would like more explanation about the AESO's rationale for modifying its rate design to introduce the proposed classification step before functionalization, and whether it has considered other approaches to functionalizing costs that may represent the uses of the transmission system.</p>
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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><b>Modernize the bulk and regional rate design to contemplate greater customer choice and a greater willingness for customers to trade off cost for reliability.</b></p> <p>TransAlta maintains that the AESO could better advance the design objectives by innovating the tariff framework instead of modifying the current structure which was designed decades ago.</p> <p>One innovation which would achieve the AESO's rate design objectives would be Load Retention rates. As discussed in Session #1, transmission costs have increased dramatically since 2014, creating a strong incentive for self-supply. Load Retention rates could remove the incentive to avoid transmission costs while supporting the energy-only market design.</p> <p>The AESO should also consider the wider suite of rates not only as a mitigation option but as a basis for a more modernized tariff design that contemplates the wider adoption of energy storage and more options for customers with respect to how their electricity needs are met (customer choice).</p>
6.	<p>Please describe any areas in which you are aligned with the AESO's preferred rate design.</p>	<p>We understand that the preferred rate design has shifted costs away from the 12 Coincident Peak (CP) and demand capacity allocators and pushed those costs to be recovered through the energy charge. As stated in our response to Question 3 above, we need additional information to fully understand the preferred rate design.</p> <p>While TransAlta appreciates the AESO's efforts to review its bulk and regional tariff design, the preferred rate design appears to shift costs in a different manner but it remains unclear if this is a better, fairer and/or more reasonable design or just a different design.</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>TransAlta asks the AESO to provide an impact analysis on the preferred rate design like that presented in Session #1.</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><b>The opportunity to modernize the tariff should consider interruptible, standby and energy storage rates.</b></p> <p>The AESO stated in its Energy Storage Roadmap that: "In the future, the AESO will ensure that the unique characteristics of energy storage are considered in ISO Tariff applications submitted to the AUC for approval." TransAlta agrees with this objective and supports the AESO's work to arrive at an energy storage rate design that achieves this end.</p> <p>TransAlta supports the consideration of DOS rates for energy storage charging capacity. However, the current structure of DOS which requires the asset to already have a DTS contract appears to be too restrictive. In this regard, the "modernized DOS" appears to be the same DOS which is generally designed to limit the attractiveness of the rate compared to DTS and limits its use to a maximum term of one year. We would prefer that the DOS rate be designed to consider the costs that are truly driven by an energy storage asset and provide discounted rates for energy storage assets that display charging behaviors or interruptibility that limit the assets imposition of system costs.</p> <p>A widely recognized issue with the ISO Tariff is the lack of interruptible rates for energy resources. Energy storage resources have fully controllable load profiles and could be valuable resources to fully utilize existing/surplus transmission capacity in an efficient manner if an appropriate interruptible service rate was created. We fully agree that the AESO should explore tariff mechanisms that reflect the costs caused by energy storage on transmission system and to remove barriers that may impede the participation in the market.</p> <p><b>Energy storage assets should not be charged transmission costs when they are required to consume from the grid to respond to over-frequency events.</b></p> <p>TransAlta reiterates our recommendation that the AESO modify its transmission tariff such that an energy storage asset that provides frequency response operating reserves is not required to pay transmission tariff when it is dispatched or directed to consume in an over-frequency event. While these are rare and infrequent events, the cost consequences from being directed to consume from the grid by the AESO are material to the energy storage owner.</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><b>Energy storage rates should reflect an energy resources' fair share of transmission costs as a load consumer as well as recognize the condition of interruptible service the resource owner is willing to accept.</b></p> <p>The AESO should develop energy storage rates that reflect the fact that energy storage assets are likely willing to accept a much greater level of interruptibility than existing DOS rates reflect. This is an opportunity to define the cost savings and system benefits that may be achieved if loads were controllable and dispatchable.</p> <p>We are concerned that the increase to the energy charge under the preferred rate design will make DOS less attractive. As stated in our comments on the preferred rate design, we need additional data and analysis to fully understand why the energy charge is increasing by such a significant amount. On its face, we see the increase in the energy charge as conflicting with the overall merit of pursuing DOS as an energy storage rate.</p> <p>Additionally, in Session #5 the AESO suggested that energy storage assets would be required to demonstrate use of excess transmission capacity to qualify for DOS rates. As mentioned above, we question whether forcing energy storage to conform to the DOS framework is approaching the development of an energy storage rate with the right mindset perspective.</p> <p>Furthermore, it would be helpful to clarify whether the concept of “minimum system” might impact the eligibility criteria for energy storage under the modernized DOS. An energy storage facility that charges exclusively from the grid will require some level of firmness in transmission capacity but that does not negate the value that its interruptibility may provide in terms of the costs of providing transmission service. At a minimum, the AESO’s rationale adds a layer of complexity, uncertainty and cost for energy storage assets.</p> <p><b>The energy storage rate should provide framework for all energy storage resources.</b></p> <p>We note that there are many types of energy storage and not all energy storage types will choose the same rate option. We believe that creating a rate design that is flexible from an applicability, terms, and eligibility criteria perspective and factors in interruptibility (i.e., allows for a customer to trade off cost and reliability) will help modernize rates to accommodate a wide variety of technologies. In creating these rates, the AESO should consider how interruptibility can be factored into system planning, the value of developing a system in which customers can select lesser reliability, and how the rate could be developed while providing energy storage proponents sufficient information to estimate their curtailment risk. Additionally, we would support the AESO providing information about how it considers energy storage in planning studies as requested by the AUC.</p>
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10	<p>Do you have any comments on the AESO’s targeted engagement approach for mitigation discussions?</p>	<p><b>The objective for any mitigation scheme should be undue hardship on customers and avoiding the loss of customers as a consequence of adopting the preferred rate design.</b></p> <p>TransAlta agrees that the AESO should approach the mitigation discussion in a targeted engagement. While some customers have been engaged in the bulk and regional tariff design work, there will also be many customers that have no awareness at all of the proposed change. We support the implementation of mitigation mechanisms particularly at this time (given the pandemic) and agree that flexibility is required to relieve customers from additional financial hardship. The AESO should be mindful that the costs of the existing transmission systems are already sunk and there is a significant risk that the preferred rate design could deter the efficient utilization of those system assets.</p>
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"> <li>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</li> <li>2. <u>Adapt with design and rates</u>: Ensure options are adaptable to changes to the proposed design and forecast rates</li> <li>3. <u>Consistent application</u>: Mitigation options can be applied consistently across all impacted loads and not be individually defined</li> <li>4. <u>Administrative simplicity</u>: Feasible to implement with current tools and systems</li> <li>5. <u>Mutually acceptable</u>: Account for feedback from broad stakeholder group</li> </ol>	<p>TransAlta generally agrees with AESO’s starting principles for mitigation. We would like to further understand how the AESO will conduct targeted engagements with customers, communicate with other stakeholders the consistent application of mitigation, and ensure that the mitigation that is employed is mutually acceptable.</p>
12	<p>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.</p>	<p>TransAlta would consider all rate mitigation options such as phase-ins or bill impact options be temporary while mitigation options such as new rates such as interruptible/opportunity rates could be permanent features of a new design.</p>

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>TransAlta supports the AESO's efforts to help transmission customers mitigate the impact of the preferred rate design. We would assess the acceptability of a proposed mitigation approach based upon customers' interest in the approach as well as its ability to retain customers and maximize the efficient utilization of the existing system.</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>TransAlta supports the implementation of a contract reset period in which the PILON is waived with the implementation of new rates. This is a challenging time for businesses in Alberta, which are managing the impact of both the economic recession and COVID-19 and may not be focused on managing their electricity bills. We suggest that the contract reset period be open for a period of time such as a year (rather than a short transition period) to provide all market participants sufficient time to see and understand the tariff impact and provide a fair opportunity respond by adjusting their contract capacity.</p>
15	<p>Do you have any additional implementation considerations the AESO should consider?</p>	<p>No additional considerations for the AESO to consider.</p>
16	<p>Do you have additional clarifying questions that need to be answered to support your understanding?</p>	<p>As stated above, we request additional data and analysis to fully understand the allocation methodology.</p>
17	<p>Additional comments</p>	<p>TransAlta supports the AUC's requests for additional information. We believe that the data, analysis and information requested is relevant and would help stakeholders to better understand the potential impacts of the preferred rate design. It would be advisable to confirm that the AESO intends to respond to these questions and by what time, and that the answers will be made public in order to give all participants the opportunity to assess them.</p>

Thank you for your input. Please email your comments to: [tariffdesign@aeso.ca](mailto:tariffdesign@aeso.ca).