

Tariff Design for Capacity Market and Bulk and Regional Transmission Cost Allocation – Industry Update (March 13, 2019)

Period of Comment:	March 14, 2019	through	April 10, 2019	Contact:	Kurtis Glasier
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Please provide comments relating to the topics listed below in the corresponding box. For convenience, references to slides from the March 13 [Industry Update](#) where each topic was discussed are included in the table below. Please include any views about whether the content presented sufficiently addressed the topic, and provide any proposed alternative or additional approaches that should be considered.

Slides	Topic	Stakeholder comments
Tariff Design Consultation Process		
5-11	AESO tariff design consultation approach, scope, and process.	<p>ATCO Power Canada (ATCO) is generally supportive of the consultation approach, scope and process outlined by the AESO.</p> <p>ATCO has found the broad stakeholder consultation, such as the March 14th meeting, particularly helpful especially when combined with the opportunity to provide in-person and written feedback to the AESO. It would be beneficial to continue to have broad stakeholder consultation at key points in the development process; this will become even more pertinent as consultation advances towards recommendation and application to the Alberta Utilities Commission (AUC).</p>
Capacity Market Cost Allocation Tariff Development Update		
15-20	Requirements of <i>Capacity Market Regulation</i>	<p>The AESO has accurately captured the requirements of the <i>Capacity Market Regulation</i> as it pertains to limitations on the capacity cost allocation framework. ATCO recommends that the AESO seriously consider the trade-offs between efficient price signaling and fair treatment for all customer classes. The incentive to decrease overall capacity procurement costs should be maintained without exacerbating a free riding problem, whereby capacity costs are unfairly allocated amongst different customer classes.</p> <p>ATCO is concerned about the treatment of exports, both XOS and XOM class rates. Further discussion regarding exports and capacity cost allocation is warranted to ensure that rates “must reflect the prudent costs that are reasonably attributable to each class of system access service [emphasis added] (<i>Electric Utilities Act</i>, 30(2)).”</p>
21-22	Resource adequacy model and unserved energy	<p>As the AESO has stated the “resource adequacy model is probabilistic tool that was specified for annual aggregate results and was not intended to provide exact forecast of hourly unserved energy (slide 25, March 13 Presentation).” ATCO would reiterate the AESO’s statement and further express concerns when drawing conclusions from a model that was not intended for that use. There may be significant value in</p>

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		<p>either testing the resource adequacy model (RAM) for its ability to reliably perform this function with reasonable accuracy or examining alternate methodologies that would achieve the desired outcomes.</p>
22	Distribution of expected unserved energy throughout the obligation period	<p>The AESO should compare the expected unserved energy as predicted by the RAM on slide 22 (March 13 Presentation) with the historic distribution of actual unserved energy in past years. This could help to identify whether the RAM is the appropriate tool to forecast hourly expected unserved energy. There may be necessary modifications to the RAM in order to “tune” it for this additional use.</p> <p>ATCO is interested in what analysis the AESO has conducted regarding the shifting of periods for unserved energy, given the unique Alberta perspective of having both a high load factor and expected unserved energy caused by supply outages. The capacity market design currently provides incentive for generators to provide reliability during periods of supply tightness; times of supply tightness are anticipated to have an increased probability of unserved energy. This means that generators will shift maintenance outages to periods that are less likely to have unserved energy, however the main driver of supply tightness is outages. If demand resources are similarly incented to avoid the pre-determined hours with expected unserved energy (as predicted by the RAM), they may be incented to increase demand at the same time as supply resources are planning their outages, the combined effect could lead to an overall higher probability of unserved energy.</p>
23-27	Bookend scenario analysis	<p>The AESO indicates on slide 23 (March 13 Presentation) that in both scenarios the On-peak load decreases and is captured in the Off-peak hours. The assumption that reactive loads would be able to shift from the on-peak to off-peak hours is likely flawed. The assumptions around load behavior should be tested using historical load behavior. It may be more reasonable to assume that load will delay operations for a few hours, likely increasing the Mid-peak load rather than stopping operations during On-peak and shifting operations to a night or weekend shift in the off-peak.</p> <p>The AESO may be able to model the impact of different rate hours (On-Peak, Mid-Peak, Off-Peak) on the procurement volume. The analysis would be modelling intensive as it would require multiple runs of the RAM for different hour blocks and potentially under different load behavior scenarios. These relative impacts on the procurement volume may help to prescribe the appropriate difference in weightings for the cost allocation rate; further efficiency could be gained from more hour blocks being created. This assessment of hour blocks with regard to their impact on total capacity procured could ground the design to fairly allocate capacity costs.</p>
25	Observations on bookend analysis results	<p>ATCO suggests that the AESO should publish the statistical analysis that accompanied the bookend scenario analysis. The reduction in minimum procurement volumes reported, 37MW and 34 MW, seem relatively minor and should be assessed for statistical significance on whether they truly do result in lower procurement and whether there is any difference between the narrow and wide peak approaches.</p>
26	Objectives for cost allocation rate design	<p>ATCO is generally supportive of the principles outlined on slide 26. There may be room in the cost allocation rate design for special consideration for those customers that participate on both the supply and demand side of the market, to ensure that the tariff design and capacity market design do not frustrate the intent of the other. For example, the incentive for performance of demand response resource on the supply side as a capacity resource is not undermined by the incentives created through the cost allocation rate design as a demand side resource.</p>
28-30	Development of 400-hr on-peak time block	<p>The AESO has not adduced the source for the statement: “Industrial loads can curtail in no more than 400 hours without impacting production capability (slide 28, March 13 Presentation).” This assumption should be tested as it seems foundational to the conclusion of an on-peak block</p>

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		of about 400 hours.
31-32	Considerations for weights of time blocks	Please see comments below with respect to Slides 34, 35-38.
33-34	Potential rate ranges	Please see comments below with respect to Slides 34, 35-38.
34	Appropriate range of weight ratios to consider	ATCO suggests that the AESO should implement a more balanced weight ratio with the plan to phase in a more aggressive weighting as performance is measured. This could help to ensure that there is not unforeseen cross-subsidization between customer classes. The weightings established need to be based on analysis that has a high band of confidence and is relatively stable/predictable. As the capacity market has yet to be implemented it may be worthwhile to consider a cautious approach to cost allocation to ensure that cost allocation has the intended impact and signaling.
35-38	Additional considerations for rates	<p>The AESO states, “rates in on-peak hours in some options may be higher than necessary to generate a response from load (slide 35, March 13 Presentation).” It may be from the ambiguity of the language, but ATCO does not support setting any rate “higher than necessary”. The rates should be set at a level to incent efficient load behavior through an effective price signal. Setting the rate too high, or higher than necessary, would lead to inefficient load behavior as capacity market bypass and cross-subsidization would occur.</p> <p>The AESO should conduct analysis on the expected size of the deferral account and related true-up. While the AESO has experience with deferral accounts, the cost allocation design should minimize the impact of true-ups to “provide stable and predictable rates” and “ensure rates are practical, understandable, and billable” (slide 26, March 13 Presentation).</p>
39-43	Terms and conditions considerations	Absent the ability to levy penalties to loads at self-supply sites, the AESO needs to examine carefully its ability to incent the correct behavior from loads. There are known reliability concerns from self-supply loads drawing above their expected levels at times of system stress. It may be necessary for the AESO to institute capacity restrictions or curtailment requirements to prevent any issues with free-riding.
40	Regulation does not permit penalties or incentives	See comments above.
42	“Gross up” of POD metered volumes to adjust for distributed generation	<p>There is insufficient information to comment on the AESO’s proposal. ATCO needs to understand if the “grossing up” approach will apply equally to both capacity and non-capacity committed distributed generation (DG) resources. This distinction is pertinent due to the increased probability of DG resources having a uniform capacity value between 1 and 5 MWs, which would allow the asset to elect whether to be involved in the capacity market auctions. ATCO sees two potential problems that are created by application of this proposal to both capacity and non-capacity committed DG resources: (1) For capacity committed DG resources the incentives to perform in real-time to signals in the capacity market will not necessarily be aligned with incentives created by the cost allocation framework. (2) For non-capacity committed DG resources, production of energy during the on-peak hours will not affect capacity charges as any production will additive at the point of delivery (POD); this seems counter-intuitive.</p> <p>ATCO recommends that further discussion and analysis on the impacts of rate design involving DG resources is required. Consideration must be given to how cost allocation at the POD is impacted by DG resources choosing not to participate in the capacity market.</p>

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43	Preferred approach for deferral account true-up	A focus of the cost allocation design should be on minimizing the size of deferral account balances and need for true-ups. ATCO believes if the size of deferral is minimized than a prospective rider should be sufficient.
44	Allocation of capacity market costs to transmission losses	ATCO remains interested in the approach that the AESO will take in reconciling the capacity costs associated with transmission line losses. The AESO should hold a technical session with the appropriate stakeholders to address the capacity cost allocation of transmission line losses. The approach seems appropriate, but there are no details surrounding the application of when these totalized costs of losses will be included and any resultant deferral account or true-up would be applied. ATCO believes that the incentives present in the calculation of loss factors need to be maintained when the capacity costs of transmission line losses are included; due to the complex loss factor methodology a broad stakeholder technical session held prior to the AUC tariff proceeding may be most appropriate.
45	Capacity market cost allocation remaining work	ATCO requests that the AESO holds another broad industry stakeholder session, similar in structure to the March 13 th update session. The AESO could prepare to respond to the requests of ATCO and other parties which have been advocated in these comments.
Update on Bulk and Regional Transmission Cost Allocation		
48-51	Bulk and regional transmission cost allocation current work, future work, and next steps	No further comment at this time.
Additional Comments		
—	Please add any additional comments related to tariff design for allocating capacity market and bulk and regional transmission costs should be considered.	ATCO would like to reiterate that further broad industry stakeholder sessions as the cost allocation framework is being finalized would be beneficial as it will allow additional points of view to be heard and will allow for further testing of the overall approach. With respect to the issue of losses, ATCO would suggest a technical session to discuss issues specific to that topic. Similarly, issues related to charging exports capacity cost allocation could further be dealt with through another technical session where impacted parties that are not necessarily members of the TDAG could participate.