

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:	Michael Turner, Chymko Consulting [c/o Stewart Purkis (LEU) and Jim Jorgensen (RD)]
Comments From:	The Cities of Lethbridge (LEU) and Red Deer (RD) Electric Utilities			Phone:	M. Turner (403-781-7691)
Date:	2019/04/01			Email:	turner@chymko.com

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.	
Capacity Market Cost Allocation Tariff Development Update		
15-20	Requirements of <i>Capacity Market Regulation</i>	
21-22	Resource adequacy model and unserved energy	
22	Distribution of expected unserved energy throughout the obligation period	
23-27	Bookend scenario analysis	<p>The presentation is not clear on whether the stated bookends have a material impact on the total dollar value of capacity procured, \$/MWh capacity procured, or whether the results are statistically significant. The analysis appears to be incomplete and it is therefore difficult to comment.</p> <p>It is important to understand the dollar impact on capacity procured to understand whether customers as a whole would be better or worse off if a small number of price-responsive customers were to change behavior in response to a given hourly capacity price.</p> <p>The cities are to understand that the AESO is using a “probabilistic tool,” which would suggest that it should be possible to report results with a confidence interval. If, for example, the confidence interval indicated the procurement volume was $\pm 35\text{MW}$ 19 times out of 20, then the cities</p>

Slides	Topic	Stakeholder comments
		would be wary about making any policy decisions based on this evidence.
25	Observations on bookend analysis results	
26	Objectives for cost allocation rate design	<p>While the cities agree with the principle of “appropriate price signals that reflect all costs and benefits,” we would submit that the following two sub-bullets stray from this principle and appear to have taken the working group into an area of study that is not particularly helpful to rationalize a just and reasonable tariff.</p> <p>Re: “load response to price signals should reduce procurement volumes in future obligation periods”</p> <p>To our knowledge and in our experience, the primary objective of ratemaking has never been to focus on what the customer should do, but instead to let the price reflect the full economic consequence and to let the customer decide how to react. In this instance, the AESO (and the cities) would like to see the customer adjust usage in a way that reduces capacity requirements; however, pursuing this as the goal itself can lead to perverse outcomes that are not in the public interest. Measuring success based on whether a customer responds introduces the risk that capacity charge revenue declines at a faster rate than the actual impact on capacity procurement costs.</p> <p>Provided that the price appropriately reflects the full economic cost of capacity and end use customers can observe that price, customers will make a rational economic decision. The customer’s rational decision might be to not change behavior, and if this is the case, the AESO should not consider this a policy failure.</p> <p>Re: “price signals should align with those from energy market and transmission tariff”</p> <p>The cities urge the AESO to price each of its services appropriately and independently. If it happens that transmission price in a given hour is high while the capacity price is low, then that is still an appropriate price signal. As per our comments above that it is inappropriate to measure success based on what the AESO believes a customer should do, it is also inappropriate to measure success based on what price signals for other services are doing.</p> <p>The only common factor in these services is that they are under the responsibility of the AESO, but otherwise there is no logical place to draw the line in what customer costs should be ‘aligned.’ There is no suggestion, for instance, that the cost of capacity should be aligned with the price of natural gas but, for some customers these might both be equally important input costs. To artificially adjust one price for the purpose of engineering some behavior is not only infeasible (the cost-benefit equation will be different for every customer), but it is also unlikely to optimize total capacity market cost.</p> <p>To our knowledge, the AESO has never considered or attempted to align the transmission tariff with the energy market. Neither have electric utilities ever attempted to align their tariff with the price of other industry functions. To begin doing so then begs the question as to whether the tariff should be aligned with other prices that are relevant to the customer, perhaps natural gas, oil, or taxes. Consideration of prices other than the capacity market only confuses the issue and dulls the price signal that the AESO is required to send.</p>

Slides	Topic	Stakeholder comments
28-30	Development of 400-hr on-peak time block	<p>Re: "Industrial loads can curtail in no more than 400 hours without impacting production capacity"</p> <p>The cities are concerned that this statement may be based on anecdotal evidence and is therefore likely to be of limited value. Inappropriately focusing on eliciting a price-response (to the detriment of focusing on an appropriate price signal) leads to the potentially false presumption that industrial loads will need to curtail, that curtailing is the only rationale response, or that a significant amount of capacity cost must be forced into a 400-hour block so that industrial <u>might</u> curtail. None of these issues should be a primary consideration of the AESO because they require the AESO to begin making social policy judgements to support one small group of customers over others. It is not even known how many industrial loads this statement would apply to, or what might be the social cost to all other customer groups.</p> <p>It is reasonable, and the cities would support analysis to answer how many hours must load be reduced in order to reduce total capacity market costs by ten percent, for instance. Subsequent sensitivity analysis might at least be able to provide some insight whether the number of hours or the magnitude of the load reduction is the more sensitive input variable for reducing capacity cost.</p> <p>Ultimately, the AESO will be required to make a subjective decision as to how many hours should be in the peak block. The cities intend to give the AESO the benefit of the doubt in this decision, provided that the decision is rationalized and supported in terms of capacity cost avoided if load were reduced in those hours.</p>
31-32	Considerations for weights of time blocks	<p>Re: "Industrial loads generally curtail at about \$250/MW" & "In hours in which industrial load has historically curtailed, pool price has typically averaged \$500-\$600/MWh"</p> <p>The cities are concerned that the AESO is focusing its limited time and resources to consider what price or weighting ratio might elicit a reaction from some customers. This information is not known, cannot be known until after cost recovery is implemented, and is otherwise not an important principle in constructing a just and reasonable price signal.</p> <p>Figures quoted by the AESO (above) are presumably from the energy market, which is highly volatile and prices can only be forecasted with uncertainty. Given such volatility, a customer cannot make long term plans to physically avoid hourly energy market fluctuations, except to financially hedge. In this case, one would intuitively expect that energy prices need to be exceptionally high before eliciting a reaction.</p> <p>The proposed capacity market cost recovery is to be different in one important respect: prices are to be prospectively known in advance for at least a year. Thus, if a customer knew with certainty that it could save \$50 /MWh by shifting load away from, say a six-hour block on Thursdays in October, the customer's cost-benefit proposition becomes much different compared to the uncertain prices in the energy market.</p> <p>There is no way to know what is the price level that will elicit the reaction, whether it will always be that way, or whether the AESO could have achieved the same effect for half the price. Focusing on eliciting a reaction will achieve a reaction, but it will not necessarily be the type of reaction that is either wanted or needed. If the goal was to guarantee a reaction, the legislation would have been different.</p>

Slides	Topic	Stakeholder comments
33-34	Potential rate ranges	
34	Appropriate range of weight ratios to consider	<p>For reasons stated in our comments for slides 31-32, there appears to be no relevant justification or rationale for the weighting ratios greater than 4:1. All ratios greater than 4:1, while interesting to at least quantify the sensitivity of cost allocation results to an input assumption, seem to be suggested on the basis of eliciting a price-response. The cities are not opposed to the AESO researching relevant methods to measure the economic value or cost of capacity, but the only potentially reasonable approach so far is the one that culminates in the 4:1 ratio suggested on slide 31. The 4:1 proposal does have faults in that it does not consider the value of capacity costs in off peak hours; it however is the only proposal advanced by the AESO that has some foundations in empirical evidence.</p>
35-38	Additional considerations for rates	<p>The cities' earlier comments regarding slide 26 would apply equally to slide 36.</p>
39-43	Terms and conditions considerations	
40	Regulation does not permit penalties or incentives	
42	"Gross up" of POD metered volumes to adjust for distributed generation	
43	Preferred approach for deferral account true-up	<p>The cities strongly support a prospective deferral account as the only potentially feasible means to pass through the intended price signal to customers. A basic principle of ratemaking is to clearly and prospectively signal the full economic value of consumption. A retrospective deferral account means that the economic value of consuming during HE 1 of January 1, 2021 would not be possible to know until January 1, 2022 at the earliest – one year after it is too late to respond. Given that the price signal must be flowed through a distribution deferral account process, distribution-connected customers would receive the price signal even later than transmission-connected customers.</p> <p>We are unable to speculate of a scenario whereby a retrospective deferral account would be more appropriate. If capacity costs are mostly fixed in advance, the rate is known in advance, and the rate is neither higher or lower than the full economic value (see comments on slide 26), the remaining material and potential forecast variances appear to be weather or conservation-related. The cities consider it unfair if the AESO were to submit a retroactive bill to customers under these circumstances; customers would have acted appropriately given the information known at the time and it appears inappropriate to retroactively reverse the economic factors they considered at the time. This would only weaken the value of the price signal in the mind of the customer. In this event, it is rational to believe that no posted price is ever final and everything except the most extreme prices should be ignored.</p>
44	Allocation of capacity market costs to transmission losses	
45	Capacity market cost allocation remaining work	

Slides	Topic	Stakeholder comments
Update on Bulk and Regional Transmission Cost Allocation		
48-51	Bulk and regional transmission cost allocation current work, future work, and next steps	
Additional Comments		
—	Please add any additional comments related to tariff design for allocating capacity market and bulk and regional transmission costs should be considered.	