

Stakeholder Comment Matrix – Feb 25, 2020

Request for feedback on sub-hourly settlement, session 1 material



Period of Comment: Feb. 25, 2020 through Mar. 13, 2020	Contact: [REDACTED]
Comments From: TransAlta Corporation	Phone: [REDACTED]
Date: 2020/03/13	Email: [REDACTED]

The AESO is seeking comments from stakeholders on its approach to reviewing sub-hourly settlement, and content from Session 1.

- 1. Please fill out the section above as indicated.*
- 2. Please respond to the questions below and provide your specific comments.*
- 3. Email your completed matrix to stakeholder.relations@aeso.ca by Mar. 13, 2020*
- 4. Stakeholder comments will be published to aeso.ca, in their original state, with personal or commercially sensitive information redacted, following Mar. 13, 2020.*

	Questions	Stakeholder Comments
1.	Please describe why you are interested in sub-hourly settlement and how it affects your business.	TransAlta is a supplier and a retailer to commercial and industrial consumers. Our generation fleet sells into the energy and operating reserves markets and directly to large consumers. We stand to be directly affected by a change to the settlement interval through the revenues we earn in the markets as well as through our contracting arrangements with consumers.
2.	Is your organization a load, supplier, both a load and supplier, a billing agent, or other. If other, please describe.	TransAlta is primarily a supplier but we are also a consumer of electricity for the station service loads.
3.	The AESO has described the scope for this process, general agenda items and timing for upcoming stakeholder engagements. Please describe if you believe the scope is appropriate. If not, please describe/provide your rationale.	<p>We generally agree that the process should follow the following process steps: (1) problem identification, (2) alternative exploration, (3) alternative analysis and evaluation including a cost and benefit analysis for each alternative, and (4) alternative selection and recommendation. We note that the AESO has identified similar process steps with the exception of identifying the cost and benefit determination before option exploration.</p> <p><i>The consultation appears to be starting with a solution and looking for a problem to apply it to</i></p> <p>In practice, the AESO has not followed this process. The AESO has initiated the consultation with a presumed solution (subhourly settlement). Rather than identify a problem or problems that require such a solution, the AESO has instead proposed “objectives” that subhourly settlement could improve. Conducting a consultation in this manner imposes confirmation bias and seeks to justify the implementation of subhourly settlement (which may or may not have merit) could limit the consideration of alternatives that could more meaningfully address a problem in our market.</p> <p><i>Allowing load participation in payments to suppliers on margin (PSM) may be a simpler, cheaper solution</i></p> <p>For example, we understand that some loads are concerned with PSM and the uplifts associated with it. If so, the AESO could consider a mechanism that would allow loads to bid into and participate in the payments to suppliers on margin as an alternative to subhourly settlement. We note that the capacity market contemplated mechanisms to permit capacity committed loads to better participate in the energy market. It may be the case that additional mechanism for loads to participate in the energy market would address the same problem that subhourly settlement addresses but at lower cost.</p>

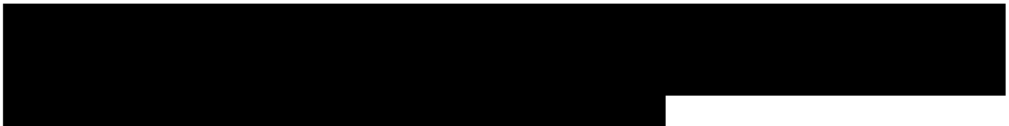
<p>4.</p>	<p>At the session, the AESO outlined the objectives of the sub-hourly settlement, which was to improve price fidelity and incent flexibility. Do you have any comments on the objectives of the sub-hourly settlement engagement?</p>	<p>We support incenting flexibility and price fidelity; however, we question whether the subhourly settlement is addressing either objective.</p> <p><i>The benefits from “price fidelity” are limited due to the current practice of intra-hourly dispatch</i></p> <p>The Alberta market is already dispatched intra-hourly in contrast to other markets where subhourly settlement intervals match dispatch intervals. We note that the AESO’s simplified “price fidelity” examples ignores this significant fact and, as a result, inaccurately portrays the “better incentive” that subhourly settlement provides. The fact that the AESO’s uses of “ad hoc” dispatch means the system controllers are already making decisions about how to meet system conditions on a minute-by-minute basis.</p> <p>Take for example two generators that are both dispatched for the same amount of MWs but one is dispatched at the top of a 15 minute interval and one is dispatched shortly before the end of the 15 minute interval. Unlike a race where the contestants start the race at the same time and measuring the distance they cover in 15-minutes, the system controller is starting all of the contestants at different times and measuring the distance covered in non-equivalent race lengths. It is highly questionable under Alberta dispatch model whether the imposition of sub-hourly settlement truly improve incentives for generators to respond. It is more likely that it will arbitrarily impact generators’ revenues for decisions that are made by the system controller and largely outside of their control.</p> <p><i>More transparency is required about the AESO use of operating reserves; our analysis shows that flexible resources do worse under subhourly settlement</i></p> <p>We observe that the AESO utilizes regulating reserves (and may use contingency reserves) to provide and/or supplement the flexibility it requires to manage supply and demand balance. We also note that the AESO has over-dispatched the energy market merit order to meet ramping requirements when, for instance, wind generation suddenly drops off.</p> <p>Given these other mechanisms that are used to meet the system’s flexibility requirements, we are unclear how sub-hourly settlement improves dispatch signals or dispatch certainty. We recognize that we have limited visibility into the manner in which the system controllers decide on using operating reserves and ask for more transparency and clarity about the AESO’s practices in order to fully understand the potential benefits.</p>
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		<p>The simplified examples that the AESO has provided are exaggerated and lead to misleading conclusions about the benefits of subhourly settlement. We rarely see intra-hourly price variability as significant as represented in the examples. Our own internal analysis which backcasts the impact of shorter settlement windows does not show a benefit for peaking or hydro generation. In fact, rather than providing a revenue benefit to these fast response resources, we observe a decrease in the revenues they earn. Lower revenues for these resources does not support a conclusion that sub-hourly settlement increases the value of flexibility; it supports a conclusion that less investment will be made into flexible resources under subhourly settlement.</p>
5.	<p>Are there considerations other than the following that should be taken into account to determine the value in moving to sub-hourly settlement interval?</p> <ul style="list-style-type: none"> • The expected enhancement in price fidelity and flexibility • The expected financial impact on loads and generators • Implementation costs for the AESO and market participants • Timing required to transition to a sub-hourly settlement interval 	<p><i>The business impact to customer contracts should also be considered; Subhourly interval data should be collected on loads well in advance of the change in settlement intervals</i></p> <p>The AESO should also consider the business impact associated with changes in commercial and customer contracts that would be required if the settlement interval were changed. More specifically, for retailers there could be a mismatch between how a contract is fulfilled (with supply metered subhourly) and customers that are settled hourly. This will likely trigger renegotiations and recontracting. We recommend that if a change to sub-hourly settlement intervals was to move forward that at least a year of data is captured first so that the customer a subhourly profile of the customer load can be obtained (to enable contracting).</p>
6.	<p>Please describe the size of your business in the approximate total MWhs consumed or produced in 2019.</p>	<p>TransAlta total MWhs produced in [REDACTED] in 2019.</p>
7.	<p>Do you currently have interval metering installed in your operations? If yes, please describe the approximate volume of your business that was measured using interval meters in 2019.</p>	<p>All of TransAlta's generation is interval metered. Please refer to our response to Question 6 above for the volume of generation that was measured using interval meters in 2019.</p>

	Questions	Stakeholder Comments
8.	<p>Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at five-minute intervals?</p> <ul style="list-style-type: none"> • Metering • IT systems • Data storage • Other 	<p>Our preliminary estimates for a change to five-minute settlement intervals are as follows:</p> <ul style="list-style-type: none"> • [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED]
9.	<p>For each of the elements listed in question 8 above, please describe the changes that would be required for your business.</p>	<p>Please see response to Question 8 above.</p>
10.	<p>The AESO is looking to understand the magnitude of costs during this initial phase. For each of the elements listed in question 8 above, please provide estimates of the cost required to implement these changes. If you are unable to provide cost estimates, please indicate when you can do so.</p>	<p>Please see response to Question 8 above.</p>
11.	<p>For each of the elements listed in question 8 above, please describe the timing required to implement these changes.</p>	<p>The estimates provided above are based upon our experiences from other jurisdictions and without considering any Alberta specific requirements. The lead time for the changes to meters and systems would require at least one year. A conversion of the entire Alberta fleet (all generators having to make this change at the same time) could lead to a longer timeline and higher cost.</p> <p>To mitigate the impacts to customer contracts, we would require 1 year of collected sub-hourly settlement data ahead of implementing the settlement interval change.</p>

	Questions	Stakeholder Comments
12.	<p>Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at 15-minute intervals?</p> <ul style="list-style-type: none"> • Metering • IT systems • Data storage • Other 	<p>Our preliminary estimates for a change to 15-minute settlement intervals are as follows:</p> <ul style="list-style-type: none"> • [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED] ■ [REDACTED]
13.	<p>For each of the elements listed in question 12 above, please describe changes that would be required for your business.</p>	<p>Please see response to Question 12 above.</p>
14.	<p>The AESO is looking to understand the magnitude of costs during this initial phase. For each of the elements listed in question 12 above, please provide estimates of the cost required to implement these changes. If you are unable to provide cost estimates by the end of the comment period (March 13, 2020), please indicate when you can do so.</p>	<p>Please see response to Question 12 above.</p>
15.	<p>For each of the elements listed in question 12 above, please describe the timing required to implement these changes.</p>	<p>Please see response to Question 11 above.</p>

	Questions	Stakeholder Comments
16.	<p>The AESO has described some challenges that may impact market participants. Are there other challenges that have not been identified that are unique to the market participant or in general?</p>	<p><i>Impacts to the competitive retail market should be explored</i></p> <p>The potential impact to retail contracting is a challenge that has not been identified by the AESO. We foresee challenges to properly hedge the risk of supplying customers that are not settled on the same basis as supply assets – at a minimum, we expect that this will result in an additional risk premium but it could also reduce competitive market liquidity.</p> <p>We also expect challenges for competitive retailers and RRO providers in managing these mismatches and settling them.</p>
17.	<p>Should sub-hourly settlement apply to all market participants? Is it fair for sub-hourly settlement to only apply to a subset of market participants?</p>	<p><i>Loads and generators should be settled on the same intervals</i></p> <p>If sub-hourly settlement is applied, it should be applied to all loads including residential loads and generators. This would ensure consistency in signals and maximize efficiency.</p> <p>We view a change to the PSM program to permit load participation as a cheaper and lower cost alternative to sub-hourly settlement. It is also a fairer alternative that permits the subset of loads to self-select without imposing changes and increased cost to move to sub-hourly settlement on other loads and generators.</p>
18.	<p>Does payment to suppliers on the margin (PSM) sufficiently incent generator response without sub-hourly settlement? If we move to sub-hourly settlement, is PSM still required to address the mismatch between settlement and dispatch interval?</p>	<p>Yes, PSM is sufficient to incent generator response without sub-hourly settlement.</p> <p>Yes, we would expect that PSM will still be required to address the mismatch between settlement and dispatch interval even if sub-hourly settlement were implemented. However, we would expect that PSM would decrease because the mismatch between settlement and dispatch interval would be smaller.</p>
19.	<p>Are there any other benefits that have not been identified? Please elaborate.</p>	<p>No. As stated above, we question the benefits that have been identified.</p>

	Questions	Stakeholder Comments
20.	<p>Is the approach used for this engagement effective? If no, please provide specific feedback on how the AESO can make these sessions more constructive.</p>	<p><i>The presentation deck and analysis should be provided well ahead of the sessions</i></p> <p>We do not have any specific feedback at this time given that we are at a very preliminary stage of the process and the timelines are still very flexible. We also understand that the information provided thus far is just illustrative. However, as we progress, we expect to see more comprehensive analysis, supporting data and modeling to understand the impacts of a change to subhourly settlement.</p> <p>We request that the AESO provide any its analysis and presentation well ahead of the session to allow stakeholders to review the analysis. Providing the information after the session is a poor use of the stakeholder sessions, which should not just be an oral recitation of presentation materials.</p>
21.	<p>The AESO seeks to be transparent through this stakeholder engagement process and would like to publish all information as received.</p> <p>Is the information provided in this feedback suitable to be published by the AESO on aeso.ca? If no, please indicate the sections of your response that should be redacted?</p>	
22.	<p>Please provide any other comments you have related to the sub-hourly settlement engagement.</p>	<p><i>The results of the system settlement audit should be considered in scope for this consultation</i></p> <p>We agree that an objective of the overall market design is the support market efficiency and any issues with system settlement that may be discovered through the audit could be magnified if they are not address ahead of any change to sub-hourly settlement. As such, we recommend that the AESO complete its planned system settlement audit in parallel and plan to consider the audit findings in the scope of this consultation.</p>

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