

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: EPCOR Utilities	Phone: [REDACTED]
Date: 2020/02/13	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.	<i>EPCOR is interested in participating as an active stakeholder in this engagement. However, as the change to sub-hourly settlement has a significant impact to many areas of our business, EPCOR does not support this change at this time.</i>
2.	Is your organization a load, supplier, both a load and supplier, a billing agent, or other. If other, please describe.	<p><i>EDTI is the DFO, LSA and MDM for the City of Edmonton.</i></p> <p><i>EEA serves as RRO and Default Supply retailers in the EDTI and FortisAlberta service territories.</i></p> <p><i>ENCOR provides competitive retail services throughout most areas of Alberta.</i></p>
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><i>EPCOR understands the scope for this process includes problem identification, cost and benefit determination, option exploration and a decision to determine the feasibility of proceeding to Phase 2. Implementation in Phase 2 would include design, rule language development and AUC process.</i></p> <p><i>In order to confirm the scope is appropriate, EPCOR requires further information and clarification of the details of the change. The detailed scope will help determine the complexity and cost of this change and help us determine if the proposed plan is appropriate.</i></p> <p><i>EPCOR is currently participating in several related initiatives including the Distribution System Inquiry, AUC Alberta Metering Working Group, CEA MTPC (Metering Committee) and the Measurement Canada Working Group. The discussion of the transition to sub-hourly settlement should be aligned with these other initiatives, where relevant to this discussion.</i></p> <p><i>EPCOR encourages AESO to adopt a longer timeline for stakeholder engagement to ensure there is a thorough discussion and understanding of all areas of impact. This would allow EPCOR to perform a more detailed review of all functional requirements and planned benefits of this change. EPCOR would also like to propose a longer timeline in consideration of the resource intensive nature of the other relevant initiatives underway.</i></p>

	Questions	Stakeholder Comments
4.	<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><i>As EPCOR is not a generator, we cannot comment on the specific objectives of the sub-hourly settlement engagement. The change to sub-hourly settlement would have a significant impact on our systems and processes throughout EPCOR. These impacts would need to be carefully considered to ensure the planned benefits outweigh the costs.</i></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>EPCOR believes that the AESO must consider the downstream financial impact on all market participants including retailers and wire owners. A thorough cost benefit analysis will help determine costs that will be passed on to market participants, including the customer.</i></p> <p><i>With regards to the Energy Price Setting Plan (EPSP), the proposed sub-hourly settlement may increase risk in the wholesale market, and for Energy Services as RRO retailer in the marketplace (ie: procurement of energy). This increased risk may increase prices, which would be passed onto customers through their energy charges.</i></p>
6.	<p>Please describe the size of your business in the approximate total MWhs consumed or produced in 2019.</p>	<p><i>EEA serves as retailer for approximately 5.3 TWh of customer load annually. EDTI's Total Consumption in 2019: 7,459,942 MWh.</i></p>
7.	<p>Do you currently have interval metering installed in your operations?</p> <p>If yes, please describe the approximate volume of your business that was measured using interval meters in 2019.</p>	<p><i>The total volume of EDTI's business measured using interval meters in 2019: 3,517,349 MWh</i></p> <p><i>In EDTI's service territory, there are 1,790 customers settled using interval data and 409,565 customers settled cumulative data. Most AMI meters are capable of supporting interval reads, however, the firmware of some meters does not allow the interval frequency to be changed due to Measurement Canada sealing guidelines. These meters may require replacement to support a five-minute interval.</i></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><i>The implementation of sub-hourly settlements at five-minute intervals would impact all areas identified including metering, IT systems, and data storage. It would also significantly impact the following areas:</i></p> <ul style="list-style-type: none"> • <i>AMI communication network</i> • <i>Business process redevelopment across EPCOR</i> • <i>Increased operational support and quality assurance requirements for IT systems</i> • <i>Forecasting, hedging, calculations, reconciliations, processing time and load settlement processes</i> • <i>Energy Price Settling Plan (EPSP) changes would require AUC approval.</i>

	Questions	Stakeholder Comments
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><i>The changes that would be required to EPCOR's business depend on the scope of the implementation and the market participants involved.</i></p> <p><i>EDTI's AMI communication network may require upgrades to support five-minute interval reads. Most AMI meters are capable of supporting interval reads, however, the firmware of some meters does not allow the interval frequency to be changed due to Measurement Canada sealing guidelines. These meters may require replacement to support a five-minute interval.</i></p> <p><i>IT System changes to support five-minute sub-hourly settlement would be extensive and would impact EDTI's AMI communication network, headend system, MDM and billing systems.</i></p> <p><i>The data storage impacts for five-minute intervals would be significant. For example, if five-minute intervals were applied to all EDTI customers, 288 readings per day from 400,000 meters would result in 115,200,000 meter reads per day. The storage impact is material but is not the highest risk of this proposed change. The highest risks are the ability of our already-constrained database servers in dealing with the extra records and the extra traffic on our meter data collection network.</i></p> <p><i>Business process redevelopment would be required for EDTI and EEA as all processes are based on hourly settlement.</i></p> <p><i>As a result of five-minute intervals, EPCOR's IT systems would require additional operational support and quality assurance processes. This is due to the large volume of data and increased granularity of interval readings required.</i></p> <p><i>From an EEA perspective, all forecasting, hedging, calculations, reconciliations, processing time and load settlement processes would be impacted. Changes to the EPSP require AUC regulatory approval.</i></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><i>In order to provide estimates of the costs required to implement these changes, EPCOR requires further clarification of scope and implementation details. Upon confirmation of these details, EPCOR estimates it would need 4-6 months to provide estimates. At this time, the magnitude of impact is estimated in multiple millions of dollars.</i></p>

	Questions	Stakeholder Comments
11.	<p>For each of the elements listed in question 8 above, please describe the timing required to implement these changes.</p>	<p><i>In order to provide estimates regarding the timing required to implement these changes, EPCOR requires further clarification of scope and implementation details. Implementation timelines must consider changes to load settlement systems, meter changes in the field, complex in-flight project work and dependencies and AUC rules development to align with proposed changes. At this time, EPCOR estimates a minimum of 3 years as a baseline for consideration.</i></p>
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><i>The implementation of sub-hourly settlements for all market participants at 15-minute intervals would impact all areas identified including metering, IT systems, and data storage. It would also impact the following areas:</i></p> <ul style="list-style-type: none"> • <i>AMI communication network</i> • <i>Business process redevelopment across EPCOR</i> • <i>Increased operational support and quality assurance requirements for IT systems</i> • <i>Forecasting, hedging, calculations, reconciliations, processing time and load settlement processes</i> • <i>Energy Price Settling Plan (EPSP) changes would require AUC approval.</i> <p><i>If the scope of 15-minute intervals applies only to those customers who are already interval metered customers, no meter replacement would be required. However, if the changes applied to all customers, a time-of-use rate structure must be considered to support these changes.</i></p>
13.	<p>For each of the elements listed in question 12 above, please describe changes that would be required for your business.</p>	<p><i>The changes required for our business to support 15-minute intervals for all market participants are similar to those as outlined above in Question #9.</i></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><i>In order to provide estimates of the costs required to implement these changes, EPCOR requires further clarification of scope and implementation details. Upon confirmation of these details, EPCOR estimates it would need 4-6 months to provide estimates. At this time, the magnitude of impact is estimated in multiple millions of dollars.</i></p>
15.	<p>For each of the elements listed in question 12 above, please describe the timing required to implement these changes.</p>	<p><i>Please see response to Question #11 above.</i></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>EPCOR envisions significant challenges during the transition from one environment to another. For example, if final settlement occurs 4 months after energy flow, how will the final settlement be completed during the transition period? A very clear implementation strategy to address any issues during the transition will be required.</i></p> <p><i>From an EEA perspective, all forecasting, hedging, calculations, reconciliations, processing time and load settlement processes would be impacted. This will place significant demand on operational resources. Changes to the EPSP require AUC regulatory approval.</i></p> <p><i>The billing system will likely require significant modifications or a complete system replacement. Changes to the new Customer Information System (CIS) are also likely but cannot be considered until the new CIS is up and running later this year.</i></p> <p><i>Any changes to the AUC System Settlement Code (SSC) will require system changes for SSC participants.</i></p> <p><i>Measurement Canada sealing guidelines may also pose a challenge with respect to changing intervals on some meters.</i></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>The proposed change to sub-hourly settlement has a significant impact to many areas of our business without a clear understanding of how the proposed objectives benefit all market participants. For this reason, EPCOR does not support this change at this time.</i></p> <p><i>To incent behavior changes, energy consumers require instantaneous access to price signals. If desired, large energy consumers have the ability to request a pulse meter to obtain access to more granular energy data. This data is used to help them make more efficient use of energy in their production and operational processes. Currently, the number of pulse meters that have been requested is 66. This may indicate that many customers are not interested in this level of granularity. Those who want this level of granularity can ask and pay a fee for the device. EPCOR proposes that other customers should not carry the burden of the infrastructure costs for the small number of customers who have expressed interest in this level of detail.</i></p>

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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><i>As a DFO, EDTI does not have any additional comments.</i></p> <p><i>From the point of view of an Energy Retailer (EEA), if this initiative reduces the PSM payable by a retailer, the end customer may benefit.</i></p>
19.	<p>Are there any other benefits that have not been identified? Please elaborate.</p>	<p><i>None that we are aware of at this time.</i></p>
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 approach used for this engagement appears to be effective however the timeline to respond and provide accurate estimates is challenging. EPCOR would like to encourage AESO to lengthen the engagement to ensure thorough understanding can be derived and to provide parties time to provide feedback. Coordination with other metering related activities in progress (as noted in Question #3) would also be prudent.</i></p>
21.	<p>The AESO seeks to be transparent through this stakeholder engagement process and would like to publish all information as received. Is the information provided in this feedback suitable to be published by the AESO on aesoc.ca? If no, please indicate the sections of your response that should be redacted?</p>	<p><i>The information provided in this feedback is suitable to be published.</i></p>
22.	<p>Please provide any other comments you have related to the sub-hourly settlement engagement.</p>	<p><i>No additional comments at this time. Thank you for allowing us to participate.</i></p>

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