<u>Stakeholder Comment Matrix – Feb 25, 2020</u> Request for feedback on sub-hourly settlement, session 1 material

Period of Comment:	Feb. 25, 2020 through Mar. 13, 2020	Contact:
Comments From:	Alberta Newsprint Company	Phone:
Date:	2020/03/11	Email:

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 <u>stakeholder.relations@aeso.ca</u> 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.

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	Questions	Stakeholder Comments
1.	Please describe why you are interested in sub-hourly settlement and how it affects your business.	Alberta Newsprint Company (ANC) is a large, flexible, electrically intensive, transmission connected Industrial consumer with behind-the-fence generation. ANC participates in many aspects of the electricity market and makes real-time decisions to optimize our electricity cost and production of newsprint. Although there are some hours where the system marginal price of power exceeds our threshold for certain components of our electrical load for an entire hour, there are many more situations where system marginal price exceeds our price threshold for a much shorter time period than an hour. Any tighter definition of the price settlement period reduces needlessly lost production of newsprint and makes more efficient use of our flexibility.
2.	Is your organization a load, supplier, both a load and supplier, a billing agent, or other. If other, please describe.	Both a load and occasionally a supplier (during very high price periods)
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.	Although the language describing the scope includes the potential benefits to price responsive load efficiency, the discussion was generally focused on benefits to generators and price fidelity. An upgrade would include exploring the increased efficiency (minimizing production loss) and potential expansion of the price responsive load market. While both generators and loads may benefit from their flexibility in sub-hourly settlement, there will likely be different rule changes required to incent flexible load versus generation. An example would be the uplift mechanism, Payment for Suppliers on the Margin (PSM) appears to be an unbalanced mechanism to provide support to generators who are dispatched at their offer price but the actual price achieved is below their offer price across the settlement period. The economics for large price responsive load are distorted for the first responder(s) since their action will often drop the system marginal price below their threshold – with the net result being a production loss without any commensurate, demonstrable savings. This leads to perverse economic behavior or a waiting game between price responsive loads.
4.	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?	ANC would suggest including production efficiency (minimizing production loss to load for their products) in the objectives. Currently in hourly settlement, there is un- necessary loss of production for a load to stay down for full hour due to high average hourly price even though the price has dropped much before the top of the hour.



 Are there considerations other than the following that should be taken into account to determine the value in moving to sub-hourly settlement interval? 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 	The list appears to be comprehensive, so long as the impact on loads includes production gains/losses.
Timing required to transition to a sub-hourly settlement interval Please describe the size of your business in the approximate	
·	ANC newsprint facility consumed 781,400 MWh of electricity. On-site power plant produced 282,000 MWh of which 24,500 was exported in 2019.
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.	ANC is a 240 kV transmission connected load and has interval meters. There is a very small load for a few outside lights which is on 25 kV and has cumulative meters. More than 99.9% of our site electricity load is measured by interval meters.
Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at five-minute intervals ? • Metering • IT systems • Data storage • Other	We are still investigating. It seems that there will be no hardware change to meter. There will changes needed to be made to IT systems and Data storage.
For each of the elements listed in question 8 above, please describe the changes that would be required for your business.	Metering: The Potential Transformers and Current Transformers are adequate. Our understanding is that the PML 7650s meters will require re-certification and programming to the revised settlement interval. No hardware change will be needed. IT systems: There are a number of plant control systems and ad-hoc reporting systems that would need to be revised to accommodate a 5-minute interval for energy and demand. Data Storage: The volume of storage increases by a factor of three since most data is stored in 15-minute blocks currently.
	 operations? If yes, please describe the approximate volume of your business that was measured using interval meters in 2019. Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at five-minute intervals? Metering IT systems Data storage Other For each of the elements listed in question 8 above, please



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10.	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.	Metering: Since this requires the cooperation of other industry participants, ANC expects to be able to respond with a cost estimate by the April stakeholder update. However, it should be minimum as no hardware changes needed. IT systems: We are still investigating but should not exceed \$50,000 Data Storage: Included in IT systems costs
11.	For each of the elements listed in question 8 above, please describe the timing required to implement these changes.	Metering: Likely 90 days IT systems: 120 days Data storage: as above
12.	Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at 15-minute intervals ? • Metering • IT systems • Data storage • Other	15 minute intervals would impact IT systems
13.	For each of the elements listed in question 12 above, please describe changes that would be required for your business.	The impact on IT systems with a 15 minute interval would be minor since it would be limited to those controls and reports that use the hourly pool price.
14.	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.	IT systems: ANC expects this effort should not exceed \$25,000
15.	For each of the elements listed in question 12 above, please describe the timing required to implement these changes.	IT systems: 90 days



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16.	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?	Operator training is an additional challenge for price-responsive loads
17.	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?	In the same way that it is not currently appropriate to expect all market participants to be interval metered, similarly, it is both fair and appropriate to only consider sub- hourly settlement for those market participants who can economically make a meaningfully contribution to the stated objectives. For example, it will very likely be economical for generators and self-retailers to move to sub-hourly settlement. The bulk of the sought benefits can be achieved in price fidelity and incenting flexibility from these market participant groups. It appears pointless, currently, to spend the money to change retailer IT systems and cumulative meter profiles (or non- programmable interval meters) when there would be no meaningful contribution to the objectives of price fidelity and incenting flexible load.
18.	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?	ANC does not currently bid load and has been told that PSM is not available to them as a load. ANC is of the opinion that modifying PSM to incorporate price responsive load, may be a worthwhile investigation to incent flexibility.
19.	Are there any other benefits that have not been identified? Please elaborate.	Avoided lost production, or production efficiency should likely be incorporated in the option evaluation
20.	Is the approach used for this engagement effective? If no, please provide specific feedback on how the AESO can make these sessions more constructive.	So far, so good
21.	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 aeso.ca? If no, please indicate the sections of your response that should be redacted?	None of the information provided by ANC in this stakeholder comment matrix is required to be redacted. However, in past, we calculated the additional power cost and loss of production due to hourly settlement compared to 15 min settlement and shared them to AESO and MSA. We will be happy to send the letter again to AESO if desired.



		Questions	Stakeholder Comments
2	22.	Please provide any other comments you have related to the sub- hourly settlement engagement.	None

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