<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

Comments From: Capstone Infrastructure Corporation

Date: 2020/03/13

Contact:

Phone:

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 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.	Capstone Infrastructure Corporation ("Capstone") in an independent power producer engaged in the development and operation of power plants in Alberta.
		Implementation of sub-hourly settlement would represent an unfair and unwarranted transfer of energy sales revenue from them to load and peaking generation, and would adversely affect our businesses. Investment decisions were made for wind and solar generation facilities on an hourly settlement model.
2.	Is your organization a load, supplier, both a load and supplier, a billing agent, or other. If other, please describe.	Supplier.
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.	

	Questions	Stakeholder Comments
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?	When setting objectives, we are most interested in understanding how AESO is quantifying improvements in price fidelity and incented flexibility and their merits, and how these quantified outcomes weigh against implementation costs for all market participants, as well as adverse financial impacts to asset owners and investors, and prospective asset owners and investors.
5.	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	
6.	Please describe the size of your business in the approximate total MWhs consumed or produced in 2019.	Capstone's current operations include a 25 MW biomass plant, and we will be bringing a 132 MWac solar project online in the next 12 months.
7.	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.	
8.	Can you identify which of the following elements will be affected by the implementation of sub-hourly settlements at five-minute intervals?	Other – adverse settlements
	Metering	
	IT systems	
	Data storage	
	Other	
9.	For each of the elements listed in question 8 above, please describe the changes that would be required for your business.	Further investigation required

	Questions	Stakeholder Comments
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.	Initial estimates shows a loss of 2% of gross revenues.
11.	For each of the elements listed in question 8 above, please describe the timing required to implement these changes.	
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	
13.	For each of the elements listed in question 12 above, please describe changes that would be required for your business.	
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.	As a generator, the material impacts relate to lost revenues and financing, and not implementation costs.
15.	For each of the elements listed in question 12 above, please describe the timing required to implement these changes.	
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?	As noted above, implementation costs are a secondary concern, the primary issue relates to lost revenue attributed to AESO's transfer of energy sales revenue (from renewable generators in particular) to load and peaking generation, and impacts to financing (debt and equity).

	Questions	Stakeholder Comments
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?	Sub-hourly should not apply to renewable generation because it represents a wealth transfer from renewable to load and peaking generation. AESO could create a separate ancillary service product that is priced sub-hourly instead to incent flexibility at greater granularity.
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?	
19.	Are there any other benefits that have not been identified? Please elaborate.	
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.	
21.	The AESO seeks to be transparent through this stakeholder engagement process and would like to publish all information as received.	Fine to publish.
	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?	
22.	Please provide any other comments you have related to the sub-hourly settlement engagement.	As noted above, the proposed sub-hourly settlement would result in a wealth transfer to load and peaking generation, and disproportionately harm renewable generators. We suggest the AESO explore alternative measures that can achieve the desired outcome without adversely affecting millions of dollars of investment on existing and planned assets participating in the province's robust energy market.

Thank you for your input. Please email your comments to: $\underline{stakeholder.relations@aeso.ca}.$