Stakeholder Comment Matrix – October 15th, 2020

DER Market Participation Options

Period of Comment:	October 15th, 2020	through October 30th, 2020	**Contact:**
Comments From:	Enel		**Phone:**
Date:	[2020/10/30]		**Email**:

Instructions:

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 comment matrix to stakeholderrelations@aeso.ca **by October 30th, 2020.**

The AESO is seeking comments from Stakeholders with regard to the following matters:

	Questions	Stakeholder Comments
1.	In your view, are there barriers or issues with DER participation in the energy and/or OR market that should be addressed now? What are those barriers or issues and how should they be best addressed?	As the AESO facilitates the entry of DERs, recognition has to be made that DER resources are much smaller but also potentially more dynamic and capable of providing value in different ways than traditional large-scale generation. This will require participation models and enablement that extract the value from the DER which will be different than that of a >5 MW traditional generator (whether behind the meter or as a stand-alone market participant). How value to the grid by a DER is measured needs to be examined. When dealing with large loads and their traditional BTF generation, measurement at the utility meter has been the only option. As DERs proliferate, situations will and have arisen where smaller assets are down stream of the utility meter and providing value to the system (by generating energy/reducing load that would have otherwise been consumed) but such value will not be measured due to the DERs' location and DERs' size relative to the size and load profile of the rest of the site. Meter configuration and measurement & verification needs to reflect the value of smaller DERs and not be "lost in the noise" due to the size of the overall facility and the traditional methods of measurement. For example, the AESO should consider how a 3 MW battery storage system connected behind the fence at a 20 MW steel mill might appear if measured at the utility meter – due to the volatile load of the steel mill (shifting 5 – 10 MW as furnaces cycle on and off intermittently), a 3 MW battery storage system following dispatch instructions

		(discharging 3 MW) perfectly might appear to be preforming erratically (or not at all) if measured at the grid connection point despite providing 3 MW of value to the grid by reducing the power that the steel mill would have otherwise consumed by 3 MW.
2.	Is it important for market participation for DER/small DCG to be addressed with market design changes now, or can this be deferred into the future? Can you identifty priority items that should be addressed first?	Market participation for DER/small DCG should be addressed now. The system operator and the rate-payer are losing out on value that cannot be extracted due to the current market design. As noted in the answer 1, review of how resources are measured should be a priority as well as minimum size for participation as per question 4.
3.	If voluntary energy market participation were to be permitted for small DER (<5MWS), would you anticipate parties to use the opportunity to directly participate in the energy market? i.e. submit bids and offers, accept and respond to dispatches, comply with all applicable ISO rules? Why or why not? Please explain.	Participation in the energy market (bids/offers and response to dispatches) should be an option for small DERs.
4.	a) Do you support lowering the minimum market participation thresholds in the energy and/or operating reserves markets? Please provide rationale as to why or why not. If yes, to what level? b) Do you support lowering the minimum market participation thresholds now, or at a future date? Please explain.	a) Yes. The minimum market participation thresholds in the energy and operating reserves market should be lowered. The arbitrary size of 5 MW prohibits the participation by smaller assets and aggregations. Almost all jurisdictions in North America have decreased their minimum participation size to 100 kw to enable the participation of non-traditional resources; resources that will provide value to the system operator and the rate-payer. As resource types evolve, so should market design to ensure new resource types who are able to provide value, can provide value. b) The minimum market participation thresholds should be lowered now. Currently AESO system is split into 5 different zones to enable participation in Operating Reserves. Since there is little to no congestion on the AESO system and directives are usually called for all zones, this would reduce the minimum size barrier to competition.
5.	If market participation thresholds are lowered for energy and/or operating reserve market participation, is there a need to review aggregation rules surrounding market participation (outside of aggregation for the purpose of meeting the market participation threshold)? Please explain.	For demand side resources participation as demand response, AESO has a fair and productive participation model which follows best practices.

6.	When considering aggregation, has the AESO missed any essential components?	
7.	Do you have any concerns or suggestions on the DER market participation process and timeline?	
8.	Do you have any other suggestions or comments you would like to share on DER market participation or the engagement activities?	Recognition has been made in the DER Update on the interdependencies and assumptions resulting from other initiatives/decisions. In the Energy Storage Market Participation Long Term Energy Storage implementation these are expanded. This includes an assumption that for Self Supply and Export - 'hybrid sites' (generation and storage) are not offside with the regulatory framework regarding self-supply. As innovation evolves, recognition needs to be made that there may be other forms of technology/resources that should be partnered together to provide value to the system operator, the rate payer and the customers. An example is the emergence of green hydrogen through partnerships of an electrolyzer and a renewable generator. The electrolyzer can act as a DER and participate in the AESO administered markets while partnered with a renewable energy asset. Under the current market participation rules, this set up would be considered self-supply which would limit export from the renewable energy resource. The rule which focused on minimizing defection from the grid, has now created a barrier for innovative energy ideas that would provide value.

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