Resource Adequacy – Feedback Form

Meeting Date: September 28, 2020

Date Submitted:	**Feedback Provided By:**	
2020/10/20	Organization:	Energy Storage Canada (ESC)
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Following the September 28, 2020 Resource Adequacy webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the following items discussed during the webinar. More information related to these feedback requests can be found in the presentation, which can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by October 20, 2020. If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Stakeholder Feedback Table

IESO Requests	Stakeholder Feedback
Principles to Guide the Resource Adequacy Framework Conversation	
The IESO proposes to use the MRP guiding principles to guide the discussion with stakeholders on the development of a high-level Resource Adequacy framework. Are there other principles that should be considered throughout this discussion?	ESC continues to be supportive of the MRP guiding principles in general. We recommend the following be incorporated into the interpretation of the principles: 1) *Efficiency* – unlocking the value and optimizing the use of existing infrastructure (e.g., energy storage can be used to improve the utilization of existing assets) 2) *Competition* – ability to compete on a level playing field and access to revenue streams of services and products that can be provided (e.g., IESO's long-term design vision for energy storage is proposed to be implemented post-MRP) 3) *Implementability* – plan for incorporating changes to the market is developed with input from stakeholders 4) *Certainty* – confidence in the market and procurement processes, timing, system needs, and targets 5) *Transparency* – particularly with respect to planning and projected future system needs
Draft Resource Adequacy Framework	
Do these three capacity acquisition timeframes (commitment and forward periods) provide sufficient options for meeting the needs of your resource type?	At a high-level, these timeframes are sufficient for most energy storage technologies, however longer timeframes are preferable for certain resources with longer-development cycles and asset-lifetimes. Short-term commitment periods and forward periods may be suitable for existing energy storage where upgrades are not required. Multi-year commitments and forward periods of 3-4 years may be sufficient for certain energy storage projects. ESC agrees that longer-term commitment periods and forward periods are required new build projects or upgrades to existing resources, including energy storage projects that meet such criteria.
Which option(s) are most suited to your resource type?	Overall, ECS recommends the use of competitive RFP/Contracts over Capacity Auctions, especially for new projects or projects requiring upgrades. Energy storage assets can be designed with operating lives of 20 years or more.

	ESC understands that the IESO is proposing that existing energy storage assets would continue to be eligible to participate in annual Capacity Auctions. Capacity Auctions with enhancements and RFP/Contracts may be appropriate for new energy storage technologies (e.g., batteries, compressed air storage). Long-term contracts may be appropriate for certain energy storage technologies with larger capital and operating cost such (e.g., pumped storage).
Based on timing when various mechanisms are going to be available, do you see timing gaps when a resource needs a mechanism before that mechanism is ready?	ESC recently published the paper "Unlocking Potential: An Economic Valuation of Energy Storage in Ontario" which provides a detailed analysis demonstrating that 1000 MW of energy storage can provide between $774 million to $2 billion in net savings under a base case and high estimate, respectively. Given the inability to fully integrate energy storage within Ontario's electricity market, in order to unlock the system-wide value of energy storage now, the IESO should contract for the full suite of services that energy storage can deliver, and should enable the co-optimized operation of these storage resources. This would allow for full realization of the savings potential for customers, which cannot be achieved within the current market design and structure. Therefore, we recommend that the IESO move forward with options to competitively procure energy storage at the earliest opportunity to achieve savings for customers in the near term.
<u>Resource Adequacy Engagement Plan</u>	
What needs to be considered in future engagement phases to develop the details of the mechanisms in the framework?	ESC recommends that future engagement phases include: • Clear coordination with the Capacity Auction Engagement stream (i.e., amendments to market rules, timeframe for annual auctions, eligibility of resources, capacity qualifications, etc.) • Coordination with IESO's Long-Term Design Vision including changes to ensure that the full value of energy storage is realized, particularly as the IESO only proposes to procure "unbundled capacity" in the short- to medium terms • Establishment of transparent planning and decision-making framework (including governance and oversight) related to the use of each type of procurement mechanism and establishment of procurement targets
What other areas need to be discussed with stakeholders to operationalize the framework?	The framework should ensure flexibility to respond to emerging trends in the electricity sector. For example, FERC Order 2222 will create new opportunities for distributed energy resources (including directly connected energy storage and behind the meter

	energy storage) participation in wholesale markets, including as part of aggregated facilities. The framework should ensure competition on a level-playing field for all resources and continue to assess the barriers in the market that prevent the efficient participation of resources in the market.