

# Incremental Capacity Auction (ICA) – Stakeholder Feedback Form

Stakeholder Meeting: September 28<sup>th</sup>, 2017

<b>Feedback request by:</b> 2017/10/26 <b>Date Submitted:</b> <a href="#">2017/10/26</a>	<b>Feedback provided by:</b> Company Name: Energy Storage Canada Contact Name: Patricia Phillips Phone: [REDACTED] Email: [REDACTED]
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The IESO held the first meeting of the ‘Options Phase’ of the Market Renewal – Incremental Capacity Auction engagement on September 28<sup>th</sup>, 2017.

The presentation can be [found here](#).

In order to maximize the effectiveness of this stakeholder engagement process, the IESO requests that stakeholders use the template below to provide feedback on content presented as follows:

- Provide responses to the questions posed
- For options presented, indicate your preference along with applicable rationale/supporting arguments (reference slide numbers where applicable)
- Identify any aspects that you believe require further elaboration or discussion

Feedback received will be summarized and will help inform further discussions at future stakeholder engagement meetings.

Design Element	Features	Questions for Stakeholders	Stakeholder Feedback
<b>Participation Requirements</b>	(1) Organization Participation and Facility Registration (2) Fees & Deposits (3) Performance Security <i>Slides 15-26</i>	<p><b>QUESTION:</b> Are there any aspects of the proposed Participation Requirements that would pose an unreasonable barrier to entry for potential participants?</p> <p><b>QUESTION:</b> What considerations should be taken into account when establishing deposit/security amounts?</p>	<p>As a general comment, the IESO Market Rules and applicable Market Manuals require greater details regarding the classification and registration of energy storage facilities for their participation and operations within the IESO-Administered Markets. This will serve to provide a needed framework for energy storage to participate within ICAs (in addition to other IESO-Administered Markets (e.g., energy, ancillary services)).</p> <p>The auction deposit / proposal security should be sufficient to discourage proponents from submitting proposals without performing necessary due diligence. The proposal security process used in LRP I was reasonable.</p> <p>Completion and performance security should be based on the clearing price of the ICA.</p> <p>Finally, when establishing desposit / security amounts, these amounts must be effectively integrated in consideration with the general framework and requirements for market participant prudential requirements (required to participate and transact within the IESO-Administered Markets). In general, prudential requirements will need to be re-evaluated within the development of ICAs.</p>
<b>Resource Eligibility</b>	(1) Ineligible Resource Types <i>Slides 34-39</i>	<p><b>QUESTION:</b> Are there any concerns with the resource types that have been identified as ineligible?</p>	No concerns

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		<p><b>QUESTION:</b> Are there any other resource types that should be ineligible?</p>	
	<p>(2) General Requirements:</p> <p>- New vs Existing Resources  <i>Slides 42-43</i></p>	<p><b>QUESTION:</b> How should new vs. existing resources be defined under the capacity auction?</p> <p><b>QUESTION:</b> In addition to facilities that are still to be built, should new resources include:</p> <ul style="list-style-type: none"> <li>-Existing facilities that have never provided energy to the grid (e.g., previously Behind-the-Meter Generation/off-grid)?</li> <li>-Upgrades to existing facilities that have uprated by some minimum percentage of their existing capacity or that include capital expenditures of a minimum \$/MW amount?</li> <li>-Existing facilities that have not operated for a number of years and are brought back into operation?</li> </ul>	<p>Proposed definitions are reasonable.</p> <p>Yes - existing energy storage facilities that have never provided energy to the grid (e.g., previously Behind-the-Meter Generation/off-grid) should be considered as 'new', considering the positive incremental capacity supply of these facilities</p>
	<p>(2b) Permits and Licensing  <i>Slides 46-49</i></p>	<p><b>QUESTION:</b> What permits should participants be required to provide to the IESO in advance of the auction?</p> <p><b>QUESTION:</b> If permits are not required prior to the auction, where should participants be in the permitting process prior to applying?                  Should the IESO:</p> <ul style="list-style-type: none"> <li>(a) Establish a specific milestone in the permitting process that projects should have reached prior to the auction, or</li> <li>(b) Require that projects have commenced any required permitting process with the onus on</li> </ul>	<p>Proponents should not have to communicate information related to the permitting process related to their project.</p> <p>Instead, the auction deposit / proposal security and further completion and performance security should be relied upon to ensure proponents will fulfill their obligations as part of the ICA. Note that this will require the auction deposit / proposal security and further completion and performance security to be of a sufficient magnitude to ensure that proponents will complete necessary due diligence before submitting proposals and will be motivated to achieve the required in-service date.</p>

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		<p>the participant to have this completed prior to the commitment period?</p> <p><b>QUESTION:</b> How should delays related to project permitting be addressed?</p>	
	<p>(2c) Project Milestones <i>Slides 50-52</i></p>	<p><b>QUESTION:</b> What type of information should the IESO require related to project milestones?</p>	<p>Proponents should only be required to provide the projected in-service date.</p> <p>Instead, the auction deposit / proposal security and further completion and performance security should relied upon to ensure proponents will fulfill their obligations as part of the ICA. Note that this will require the auction deposit / proposal security and further completion and performance security to be of a sufficient magnitude to ensure that proponents will complete necessary due diligence before submitting proposals and will be motivated to achieve the required in-service date.</p>
	<p>(2d) Connection Assessment <i>Slides 53-56</i></p>	<p><b>QUESTION:</b> What other considerations should the IESO take into account related to connection of new projects?</p> <p><b>QUESTION:</b> What information, if any, do participants require from the IESO related to connection availability prior to offering into the auction?</p>	<p>IESO should publish a detailed Transmission and Distribution Table and provide a way for proponents to ask questions and receive confirmation of connection availability. Therefore, IESO should undertake a formal review of the existing framework establishing a connection queue and related impact assessments (e.g., System Impact Assessments).</p> <p>A mandatory requirement for bidding into ICAs should be that proponents have received confirmation of connection availability from IESO. This will require reform of the connection queue and the process to secure connection capability.</p>

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			<p>If a proponent receives a contract through the ICA, but is ultimately not able to receive SIA approval (assuming SIA approvals are not a prerequisite for participation within ICAs), then the proponent should be relieved of obligations under the ICA and the associated auction deposit / performance security should be refunded.</p>
	<p>(2e) Project Financing  <i>Slides 57-59</i></p>	<p><b>QUESTION:</b> To minimize risk of the project not being developed, should the IESO require participants to provide project financing information, or rely on prudentials and/or other deposits?</p> <p><b>QUESTION:</b> If required, what type of information should participants be required to provide?</p>	<p>No, the auction deposit / proposal security and further completion and performance security should be relied upon to ensure proponents will fulfill their obligations as part of the ICA. Note that this will require the auction deposit / proposal security and further completion and performance security to be of a sufficient magnitude to ensure that proponents will complete necessary due diligence before submitting proposals and will be motivated to achieve the required in-service date.</p>
	<p>(2f) Project Development Experience  <i>Slides 60-61</i></p>	<p><b>QUESTION:</b> Should the IESO require participants to demonstrate project development experience? For all projects or only projects over a certain size?</p> <p><b>QUESTION:</b> How should this experience be demonstrated?</p>	<p>Yes, development experience that involves electrical generation project development of a similar scale should be required. Experience with permitting an electrical generation project in Ontario should also be a mandatory criterion.</p> <p>Experience should be demonstrated by a listing of the reference projects the proponent was involved in and a clear description of their role.</p>
	<p>(2g) Site Access  <i>Slides 62-63</i></p>	<p><b>QUESTION:</b> To minimize risk of the project not being developed, should the IESO:</p> <ul style="list-style-type: none"> <li>(a) Require participants provide information regarding site access, or</li> <li>(b) Rely on non-performance implications to provide the necessary incentives (e.g. loss of deposit, damage charges, etc.) for developers</li> </ul>	<p>No, the auction deposit / proposal security and further completion and performance security should be relied upon to ensure proponents will fulfill their obligations as part of the ICA. Note that this will require the auction deposit / proposal security and further completion and performance security to be of a sufficient magnitude to ensure that proponents will complete necessary due</p>

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		to ensure they only offer in projects that can be developed on time?	diligence before submitting proposals and will be motivated to achieve the required in-service date.
	(2h) Project Support <i>Slides 64-65</i>	<p><b>QUESTION:</b> Should project support be a mandatory (i.e., pass/fail) requirement?</p> <p><b>QUESTION:</b> If an optional requirement, how should it factor into resource selection?  <i>(noting that resource selection would otherwise be based solely on offer price and system constraints)</i></p> <p><b>QUESTION:</b> If so, what should participants be required to provide to demonstrate project support (e.g., council resolution)?</p>	<p>Confirmation of project support should not be required.</p> <p>Instead, the auction deposit / proposal security and further completion and performance security should be relied upon to ensure proponents will fulfill their obligations as part of the ICA. Note that this will require the auction deposit / proposal security and further completion and performance security to be of a sufficient magnitude to ensure that proponents will complete necessary due diligence before submitting proposals and will be motivated to achieve the required in-service date.</p>
	(2) General Requirements:  - Questions for Discussion <i>Slide 66</i>	<p><b>QUESTION:</b> Are there any other general requirements that stakeholders believe participants should be required to meet?</p> <p><b>QUESTION:</b> Any foreseeable issues as a result of requiring all participants (i.e., various technology types, new vs. existing) to meet the requirements outlined in this feature?</p>	
	(3) Resource Specific Requirements:  (3a) Energy Storage <i>Slides 68-70</i>	<b>QUESTION:</b> What factors should be considered related to the treatment of energy storage resources in the ICA?	Energy Storage should be able to participate in the IESO-Administered Markets in a way that allows the use of these assets to be optimized and scheduled in such a way that allows them to provide a variety of different services (i.e. Energy, Regulation Service, OR, Voltage Regulation, etc.), whether as specifically energy storage facilities or in combination with other resources (e.g.,

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			renewable generators, demand-response resources, etc.).
	(3b) Demand Response Slides 71-72	<p><b>QUESTION:</b> How does eligibility need to evolve as resources are transitioned from the DR Auction to the ICA?  <i>(recognizing that the ICA will likely procure a different product than the DR Auction)</i></p> <p><b>QUESTION:</b> Is there anything else the IESO should consider related to the transition of DR resources from the DR Auction to the ICA?</p>	
	(3c) Aggregated Resources Slides 73-77	<p><b>QUESTION:</b> Are existing obligations in the Market Rules regarding aggregation sufficient to facilitate desired participation in the ICA?</p> <p><b>QUESTION:</b> If the IESO was able to upgrade the necessary tools and processes to be able to accommodate smaller resources, what would be a reasonable threshold? (e.g., 100 kW?)</p> <p><b>QUESTION:</b> Are there any other resource aggregation issues stakeholders would like the IESO to consider?</p>	<p>Consistent with the general point stated from the outset of this feedback form, aggregation needs to be part of the framework to register and classify energy storage facilities for participation within the IESO-Administered Markets.</p> <p>Regarding lower project / facility size threshold for energy storage, the IESO should consider workable thresholds that are commensurate with the need for specific system needs that could be effectively provided by some resources. For example, if the IESO were to determine that energy storage facilities could provide needed system flexibility, the lower size thresholds should permit need energy storage participation. Therefore, this may necessitate projects / facilities lower than 10 MW (i.e., a common threshold used at times to define whether a facilitate can register as an IESO market participant). In general, even if the resource were relatively small (i.e., between 100 kW to 10 MW),</p>

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			the design of the ICA should not preclude participation of such resources.
	(3d) Contracted Resources  Issue #1 (Uprates) <i>Slides 80-82</i>	<b>QUESTION:</b> What are potential options for dealing with this issue while ensuring no additional costs to ratepayers under the PPA?	
	(3d) Contracted Resources  Issue #2 (Determining Incremental Capacity) <i>Slides 83-88</i>	Please identify preferred option and provide supporting rationale. <b>OPTIONS:</b> 1. $IC = QC - CC$ 2. $IC = QF * (NC - CC) = QF * MC$  <b>QUESTION:</b> Which Option provides a solution that is fair to both participants and ratepayers and ensures resource adequacy needs are met? - Are there any additional options that should be considered? - How would this change if the uprated MW were separately metered?	
	(3d) Contracted Resources:  Additional Questions for Discussion <i>Slide 90</i>	<b>QUESTION:</b> Are there any other items/issues that should be considered related to the participation of incremental capacity from contracted facilities?	No – IESO should keep this simple by permitting any capacity over contractually specified “Contract Capacity” as being eligible for participation within ICAs.
	(3e) Regulated Entities <i>Slides 91-92</i>	<b>QUESTION:</b> Are there any specific participation requirements or issues to be considered associated with the participation of Regulated Entities?	



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	(3f) Imports <i>Slides 93-95</i>	<p><b>QUESTION:</b> Should the import of both new and existing resources be eligible?</p> <p><b>QUESTION:</b> Are there specific fuel types that should not be eligible to provide imported capacity?</p> <ul style="list-style-type: none"> <li>- Coal is not permitted to be used to generate electricity in Ontario, should this restriction be extended to importing generators/jurisdictions?</li> <li>- Can imports backed by intermittent generation be counted on to meet system adequacy needs?</li> </ul> <p><b>QUESTION:</b> Should system-backed imports be eligible?</p> <p><b>QUESTION:</b> Should imports backed by a proponent’s portfolio of resources be eligible?</p> <p><b>QUESTION:</b> Are there any other considerations that should be considered in relation to the eligibility of imported resources for Ontario?</p>	
<b>Qualified Capacity</b>	(1) Planned / Maintenance Outages <i>Slides 109-114</i>	<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTIONS:</b></p> <ol style="list-style-type: none"> <li>1. Include planned/maintenance outages implicitly as part of the “Intermittent and Energy Limited” resource’s historical production data</li> <li>2. Exclude planned/maintenance outages implicitly as part of the “Intermittent and</li> </ol>	

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		<p>Energy Limited” resource’s historical production data</p> <p><b>QUESTION:</b> What other considerations should be taken into account for how planned &amp; maintenance outages impact Qualified Capacity?</p>	
	<p>(2) Forced Outages  <i>Slides 116-122</i></p>	<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTIONS:</b></p> <ol style="list-style-type: none"> <li>1. Exclude OMC outages from EFORD calculation for “Thermal Resources”</li> <li>2. Include OMC outages from EFORD calculation for “Thermal Resources”</li> </ol> <p><b>QUESTION:</b> What type of forced outages should be excluded, if any, when determining EFORD for Qualified Capacity?</p>	
	<p>(3) Seasonal Capability  <i>Slides 124-130</i></p>	<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTIONS:</b></p> <ol style="list-style-type: none"> <li>1. Annual test and/or historical production data for “Thermal Resources”</li> <li>2. Seasonal test and/or historical production data for “Thermal Resources”</li> </ol> <p><b>QUESTION:</b> What other considerations need to be taken into account related to Seasonal Capability when determining Qualified Capacity?</p>	

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	(4) Locational Constraints <i>Slides 132-135</i>	<b>QUESTION:</b> What other considerations should be taken into account with respect to Locational Constraints?	
	(5) New Resources <i>Slides 137-145</i>	Please identify preferred option and provide supporting rationale. <b>OPTIONS:</b> 1. Similar class average values (NERC GADS or CEA) 2. Obtain simulated data from a provider 3. Similar existing unit(s) in Ontario  <b>QUESTION:</b> What other considerations should be taken into accounting when establishing the Qualified Capacity of a new resource?	
	(6) Methodology  (6a) Aggregation Level <i>Slides 148-149</i>	<b>QUESTION:</b> What other considerations for aggregation level should be taken into account when determining Qualified Capacity?	
	(6b) Calculation Method <i>Slides 150-156</i>	Please identify preferred option and provide supporting rationale to calculate Qualified Capacity for “Intermittent and Energy Limited” Resources. <b>OPTIONS:</b> 1. Capacity Contribution 2. Effective Load Carrying Capability (ELCC)  <b>QUESTION:</b> What calculation method should the IESO adopt to qualify capacity from Thermal or Intermittent and Energy Limited resources?	

**General Comments/Feedback:**