

# Incremental Capacity Auction (ICA) – Stakeholder Feedback Form

Stakeholder Meeting: November 6<sup>th</sup>, 2017

<b>Feedback request by:</b> 2017/12/04 <b>Date Submitted:</b> <i>YYYY/MM/DD</i>	<b>Feedback provided by:</b> Company Name: _____ OWA _____ Contact Name: _____ Paul Norris _____ Phone: _____ [REDACTED] _____ Email: _____ [REDACTED] _____
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The IESO held the third meeting of the ‘Options Phase’ of the Market Renewal – Incremental Capacity Auction engagement on November 6<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)
- For the recommendations/next steps presented, indicate your agreement/ disagreement 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 / Next Steps / Recommendations	Stakeholder Feedback
<b>Resource Performance Obligations</b>	(1a) Must-offer Timeframe <i>Slides 38-41</i>	<b>RECOMMENDATION</b> - Participants will have a must-offer obligation in both the day-ahead market and real-time energy market	Agreed
<b>&amp; Performance Assessment</b>	(1b) Must-offer Amount <i>Slides 42-46</i>	<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTION 1:</b> Rely only on future Qualified Capacity (UCAP) ratings to drive the desired behaviour (note: this incentive is inherent to the design of the Qualified Capacity process and will occur by default)</p> <p><b>OPTION 2:</b> In addition to Option #1, also establish a “Pay-for-Availability” mechanism that considers the amount of capacity that was offered by the resource during the Commitment Period and reduce payments if it falls below their Capacity Obligation</p> <p><b>QUESTION:</b> Should availability be assessed via a Pay-for-Availability mechanisms or are existing incentives in the energy market and updates to future Qualified Capacity ratings sufficient?</p> <ul style="list-style-type: none"> <li>• Consideration will also need to be given to whether or not both Pay-for-Availability and Pay-for-Performance mechanisms are required to define the desired capacity product</li> </ul>	It will be important in the first instance to ensure that “Qualified Capacity” for existing waterpower facilities is appropriately established to ensure that “incremental capacity” is incented. This will require careful consideration of existing contractual terms and conditions.

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		<p>Please identify preferred approach and provide supporting rationale.</p> <p><b>Approach 1</b> - Hourly Assessment: Ensure the MWs offered and/or generated are greater than or equal to the Capacity Obligation in each hour during which performance is assessed</p> <p><b>Approach 2</b> - Average Assessment: Ensure the MWs offered and/or generated are greater than or equal to the Capacity Obligation on average over the commitment period</p> <p><b>QUESTION:</b> If the decision is made to have a Pay-for-Availability mechanism, what approach for implementing the mechanism should be adopted (i.e. assess “on average” or “in each hour”)? Should the same approach be used for all resource types?</p> <p><b>NEXT STEPS</b> - Taking into account the stakeholder feedback and system operational needs, the IESO will work with Brattle to further explore the options associated with these features and provide a preliminary recommendation to stakeholders in a future meeting</p>	<p>With respect to “must-offer” requirements which include a “pay for availability” feature, an “on average” mechanism should be used for waterpower resources given the variation in hydrology that can occur over the commitment period.</p>
	<p>(1c) Must-offer Hours  <i>Slides 47-52</i></p>	<p><b>QUESTION:</b> Should availability be assessed via a Pay-for-Availability mechanisms or are existing incentives in the energy market and updates to future Qualified Capacity ratings sufficient?</p> <ul style="list-style-type: none"> <li>• Consideration will also need to be given to whether or not both Pay-for-Availability and Pay-for-Performance mechanisms are required to define the desired capacity product</li> </ul>	<p>Will depend on decision made above....</p>

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		<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTION 1:</b> Assess participants’ availability 24hrs a day, and there will be non-performance implications for not meeting the obligation, which could be greater during pre-defined hours with elevated outage risk</p> <p><b>OPTION 2:</b> Assess participants’ availability only during pre-defined delivery period, and there will be non-performance implications</p> <p><b>QUESTION:</b> If the decision is made to have a Pay-for-Availability mechanism, over what hours should the assessment take place?</p>	
		<p><b>NEXT STEPS:</b> Taking into account the stakeholder feedback and system operational needs, the IESO will work with Brattle to further explore the options associated with these features and provide a preliminary recommendation to stakeholders in a future meeting</p>	
		<p><b>RECOMMENDATION:</b> Participants would have a must-offer obligation 24 hrs per day; potential for modifying obligations due to resource-specific constraints</p>	<p>So, does this mean that the must obligation for solar at night is 0?</p>
	<p>(1d) Outage Planning and Reporting  <i>Slides 53-55</i></p>	<p><b>RECOMMENDATION:</b> Participants required to follow existing Outage Management processes, which per existing Market Rule and Market Manual obligations requires submission of planned, maintenance, and forced outage data</p>	<p>Agree</p>

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		<b>RECOMMENDATION:</b> If Pay-for-Availability mechanism is adopted, the non-performance charges calculated should not be impacted by approved planned outages	Agreed
	(1e) Capacity Check Test <i>Slides 56-58</i>	<b>RECOMMENDATION:</b> IESO should be able to conduct Capacity Check Tests during the Commitment Period	Agreed
	(2a) Response during Emergency Events <i>Slides 60-66</i>	<b>QUESTION:</b> Do stakeholders think that a Pay-for-Performance mechanism should be adopted as part of the ICA? <ul style="list-style-type: none"> <li>• If so, under what circumstances should relief be granted for not generating during emergency events?</li> </ul>	Need to have a much clearer definition of what constitutes an “emergency event” for Ontario than the list of “emergency actions” provided on slide 61....
		<b>NEXT STEPS:</b> Taking into account stakeholder feedback and system operational needs, the IESO will work with Brattle to further explore whether a Pay-for-Availability and/or a Pay-for-Performance mechanism is appropriate for Ontario and present a recommendation back to stakeholders at a future meeting	
	(3a) Self-Scheduling vs. Dispatchable <i>Slides 67-70</i>	Please identify preferred option and provide supporting rationale.  <b>OPTION 1:</b> Only allow Dispatchable resources to participate in the ICA <b>OPTION 2:</b> Allow Dispatchable and limited amount of Self-Scheduling resource to participate in the ICA  <b>QUESTION:</b> If participants below a size threshold are allowed to register resources as Self-Scheduling, what considerations should be taken into account when setting the threshold?	The ICA should be open to as broad a range of participants as possible and be designed considerate of Ontario’s existing fleet. For waterpower, Option 2 is therefore preferred, with a size threshold that is inclusive of the significant existing and potential small hydro in the province.

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		<p><b>RECOMMENDATION:</b> Require participants to be dispatchable, with exemptions for some resources below a certain size threshold to participate as self-scheduling resources</p>	<p>Adopt current market rule threshold (below 10 MW for self scheduling) until visibility is improved, suggest a loierer limit of 100kW.</p>
	<p>(3b) Dispatch Dead-band  <i>Slides 71-74</i></p>	<p><b>QUESTION:</b> What technology specific considerations should be taken into account when setting the dispatch dead-band?</p>	<p>For hydro units, managing dead band becomes more a question of forecasting turbine head conditions, particularly on long dispatch intervals where output will naturally tail off due to head changes. “run of river” facilities operating under head-pond control management regimes will have difficulty operating within a narrow dead band regime and still remain compliant to both their Water Management Plan and Dispatch obligations.</p>
		<p>Please identify preferred option and provide supporting rationale.</p> <p><b>OPTION 1:</b> Absolute Quantity (MW)  <b>OPTION 2:</b> Percent of dispatch instruction (%)  <b>OPTION 3:</b> A combination of both (MW and %)</p> <p><b>RECOMMENDATION:</b> Establish a consistent percentage dead-band for compliance with dispatch instruction for all resources, and remove absolute quantity (MW) thresholds</p>	<p>Option 3</p>
		<p><b>NEXT STEPS:</b> Assess appropriate threshold for dead-band based on stakeholder and internal IESO consultations</p>	

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	(3c) Minimum Dispatch Duration <i>Slides 75-78</i>	<p><b>QUESTION:</b> What technology specific considerations should be taken into account establishing the minimum dispatch duration?</p>	<p>Primary concern will be thermal cycling, particularly on generator windings and bearings. Dispatch should be sufficiently long to allow equipment to come to normal operating temperature. Short term not a major concern, but repeated short cycling will reduce equipment life.</p> <p>Next major issue is fuel availability. Water Management Plan constraints (min elevation, min flow, ramp rates) can become restrictive in low flow scenarios to the point of impeding sustained deliverable capacity.</p> <p>Cascaded river systems need to be factored in, particularly where multiple operators are on a river. Their operations are not coordinated from a power system perspective, thus hydraulic capacity at downstream facilities is not necessarily “guaranteed” if the upstream facilities are controlled by a different operator.</p>
		<p><b>NEXT STEPS:</b> Conduct further analysis of system needs to set the minimum dispatch duration based on reliability studies, taking into consideration resource type and capability</p>	<p>Agreed</p>
	(3d) Resource Operational Limitations <i>Slides 79-82</i>	<p><b>QUESTION:</b> What specific operational limitations should be considered for each type of resource?</p>	<p>Hydraulic conditions &amp; Water Management Plan implications for both peaking and non-peaking hydro.</p> <p>Maintenance outage windows – IESO standard assumption (based on other discussions) appears to assume hydro plants have flexibility in moving outages around, which is not necessarily the case.</p>

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		<p><b>NEXT STEPS:</b> IESO to continue working with stakeholders to investigate options to reduce the unique resource operational limitations such that the ICA procures a consistent/uniform capacity product</p>	

**General Comments/Feedback:**