Technical Panel: Response to Feedback

Feedback Summary

Following the April 19th Vote to Post meeting, the Technical Panel invited stakeholders to provide feedback on the Market Rule Amendment Form (MR-00469-R0) posted to the Technical Panel webpage. Feedback was received from the following stakeholders:

- Advanced Energy Management Alliance
- Enel X
- Voltus Energy Canada Ltd.
- Rodan Energy Solutions
- Ontario Power Generation

The IESO has grouped responses to this feedback into three categories: responses to new feedback that has not been previously addressed, supplemental responses to feedback provided in previous response documents posted to the Resource Adequacy engagement webpage, and feedback that is outside the scope of the 2022 capacity auction enhancements.

New Feedback in May 3, 2022 Technical Panel Feedback Document

The feedback detailed below is new and was not previously submitted to the IESO through the Resource Adequacy engagement.

Definition of Advisory Notices

Stakeholders requested IESO establish a concrete definition of the advisory notice that indicates there is potential for the declaration of an emergency operating state. The request is driven by ambiguity regarding conditions under which the Augmented Availability Charge will apply.

IESO Response:

• The augmented availability charge will be applied when an advisory notice is issued for one of the following four conditions: An Energy Emergency Alert (EEA)-1, EEA-2, EEA-3 (these signal the



potential for the declaration of an emergency operating state), or the declaration of an emergency operating state.

• IESO will update section 1.6.26.3.2A of Market Manual 5.5: Physical Markets Settlement Statements to reflect this clarification

Updating Offers Without Penalty After Issuance of Advisory Notice

Stakeholders request that following the issuance of an advisory notice indicating potential for the declaration of an emergency operating state, capacity auction resources be given a reasonable period to update their offers without penalty. The example provided relates to a planned outage of an HDR resource that then can be rescheduled due to the issuance of the notice, in which case the HDR resource should have the opportunity to increase their offer price to respond to unexpected emergency conditions.

IESO Response:

- The augmented availability charge is assessed in the same manner as the availability charge, with a higher multiplier applied
- This request would run counter to the purpose of the Augmented Availability Charge, which is to incentivize capacity to be available during times of system need
- The sequenced timing of system advisory notices gives market participants the situational awareness to plan operations well in advance of an EEA-1, 2 or 3 being issued. In addition, adequacy reports available on the IESO reports site provide an indication of potential system needs much further out in advance. Participants can use these reports to inform when appropriate actions need to be taken, prior to the issuance of an EEA or emergency declaration.

Outages in Emergency Conditions

Stakeholders raised concerns regarding the treatment of resources that are on an approved outage at the time an advisory notice for the potential declaration of, or the declaration of an emergency operating state, is issued. Specifically, that the augmented availability charge would still apply to resources in these conditions even if they are on an outage approved by the IESO.

IESO Response:

- The IESO has the ability to recall or revoke outages as part of the actions that can be taken in advance of and during an IESO controlled grid emergency operating state (per Market Manual 7.1: IESO-Controlled Grid Operating Procedures)
- When assessing an outage request, the IESO must consider whether the outage would pose a risk to grid reliability before providing approval (per section 3.5 of Market Manual 7.3: Outage Management) based on anticipated conditions
- Not all capacity auction eligible resource types are enabled to submit outage information to the IESO, and hence exemptions to the augmented availability charge cannot be fairly applied across all resource types, but can be considered for future capacity auction enhancements.

Availability True-Up Application

Stakeholders commented that the availability true-up mechanism would not apply to a resource that did not have a performance adjustment factor (PAF) applied at the time of qualification as it is capped at a resources ICAP which could be equal to its unforced capacity (UCAP) if a PAF is not applied. In addition, it was suggested that the scale of the true-up is not sufficient as the augmented availability charge is equal to 10 times the availability charge but the true-up mechanism is not scaled in the same way.

IESO Response:

- The availability true-up is a mechanism to ensure the availability charges incurred during outages or de-rates can be offset against those hours that the resource was available up to their cleared ICAP. The true up calculation does not include the augmented availability charge.
- A resource that did not have an availability de-rate or a PAF applied at the time of qualification are considered to be offering reliable capacity into the auction and therefore are less likely to incur availability charges

Performance Adjustment Factor in the Market Rules and Manuals

Stakeholders requested the IESO add clarity to the Market Rules regarding the PAF determination being dependent on the performance in the capacity auction capacity test.

IESO Response:

- The Market Rules lay the foundation for the qualification process and capacity testing, while Market Manual 12: Capacity Auctions contains the detailed formulas to derive the qualified capacity, including the PAF.
- In the Market Rules, the definition of unforced capacity (UCAP) states, among other things, that the UCAP value itself is derived using the capacity qualification process described in the applicable market manual. Similarly, the definition of capacity auction capacity test describes the test at its' core principles, and points to the applicable Market Manual for the details on the evaluation process.
- In Market Manual 12: Capacity Auctions, section 3.3 (Capacity Qualification), under the 'Capacity Qualification: Assessment' sub-heading, the formulas to determine the UCAP by resource type are listed. Included in these formulas is the PAF, accompanied by a definition which reads:

PAF is the Performance Adjustment Factor which reflects historical performance during a capacity auction capacity test activation in the relevant summer or winter obligation period from two auctions prior, starting with the obligation periods associated with the 2022 capacity auction. It will be calculated in accordance with the formula in Section 5.3 Capacity Auction Capacity Test.

• Finally, section 5.3 (Capacity Auction Capacity Test) details the conditions under which a resource would be subject to a future PAF following a capacity auction capacity test and provides the formula for which the factor will be calculated.



Supplemental Responses to Feedback Provided Through the Engagement

The feedback detailed in this section was received through the Technical Panel invitation to stakeholders, as well as through the Resource Adequacy engagement. This feedback was originally responded to by the IESO during the feedback cycle, however, additional clarity on each topic is provided below.

Out-of-Market Payments for Capacity Tests

Stakeholders indicated a lack of support for the IESO's exclusion of energy payments for HDR resources for capacity auction capacity tests. Stakeholders stated Market Participants should be compensated based on their actual cost of compliance for any test associated with the capacity auction.

IESO Response:

- Out-of-market payments remain in effect for all resources for capacity auction dispatch tests
- For the new Capacity Auction capacity test, no resources will receive out-of-market payments due to the difficulty in determining the actual cost of compliance for each individual resource
- Going forward, IESO expects all market participants to manage the cost of compliance with a capacity auction capacity test through their capacity auction offers

Eligibility for Reduced Testing

Stakeholders requested IESO reinstate HDR resource eligibility for reduced testing upon completion of a successful capacity test.

IESO Response:

- Under the new capacity auction capacity test, capacity will be assessed for all resources based on the unique energy market participation model of each resource
- Per Market Manual 4.3, Section 7.2, HDR resources must be capable of sustaining a curtailment based on a schedule in the energy market for up to four consecutive hours, so the capacity test is constructed to demonstrate this capability
- If a dispatch test is warranted, HDR resources will be activated for up to 4 hours, though a dispatch test may not be necessary if a participant demonstrates their ability to follow the schedule they are dispatched to during a capacity test

HDR Outages

Market Participants have raised concerns about large contributor outages on the day of an activation impacting capacity test assessed performance, which in turn impacts capacity qualification in the subsequent capacity auction

IESO Response:

• IESO has engaged stakeholders a number of times on this issue since June 2021 in targeted discussions and formally through the baseline review engagement

- IESO has not been able to definitively identify the same concerns regarding performance measurement when a contributor is on outage, however, in response to stakeholder concerns IESO has been exploring potential solutions to this issue and is open to further discussing specific examples brought forward by stakeholders
- In terms of the 2022 capacity auction enhancements, Market Participants will be able to manage this perceived risk under the new testing framework due to the flexibility to self-schedule their capacity test within a 5-day testing window to avoid outages

Requirement for a Dispatch Test

Stakeholders requested clarity on whether successful performance in a capacity auction capacity test would negate the need for the IESO to perform a capacity auction dispatch test.

IESO Response:

• The conditions under which the IESO may determine a dispatch test is not required can be found in section 5.3.3 of the draft Market Manual 12: Capacity Auctions, under the sub-heading 'Capacity Auction Dispatch Tests', posted to the Technical Panel webpage.

Eligibility for Capacity Test Reschedule

Stakeholders requested the clarity on whether there will be an option to reschedule the test week if an HDR experiences a forced outage.

IESO Response:

- The conditions under which the IESO will consider scheduling a second testing week can be found in the draft Market Manual 12: Capacity Auctions, posted to the Technical Panel web page. Specifically, in section 5.3.3 (Testing of Capacity Auction Resources), under the sub-heading 'Capacity Auction Capacity Tests'. Included in this section are the 'Allowable Exceptions', which are the circumstances under which the IESO would consider scheduling a second testing week. These allowable exceptions apply to HDR resources, dispatchable loads, generation and storage.
- If a participant with an HDR resource experiences a non-performance event during the testing week, it is the responsibility of the participant to manage its non-performance in accordance with Market Manual 7.3: Outage Management. If the non-performance event meets the criteria of one of the allowable exceptions, a second testing week may be scheduled.

Notice of Capacity Test

Stakeholders requested confirmation on whether notice of the timing of the capacity testing week should be added to the Market Rules and Market Manuals

IESO Response:

Notice of the timing of the capacity testing week can be found in sections 19.4.11A, 19.5.7A, 19.7.7A, and 19.11.7A of Ch. 7 of the Market Rules (found in the Market Rule Amendment Form, MR-00469-R00), and in section 5.3.3 of the draft Market Manual 12: Capacity Auctions. Both of these documents are posted to the Technical Panel webpage.

Buy-out Process

Stakeholders requested clarity on how a participant should manage their energy market bids/offers in the case of a buyout.

IESO Response:

 Clarifying language was added to section 7 of the draft Market Manual 12: Capacity Auctions, posted to the Technical Panel webpage.

Registered Capability of an HDR Resource

Stakeholders requested clarity on how the IESO is determining an HDR resource's Registered Capability in order to understand how the true-up payment would be applied to this resource type.

IESO Response:

 IESO has no additional comments to what was provided in the February 24, 2022 Response to Feedback document. The Registered Capability of a virtual HDR resource represents the sum of capacity for all contributors registered to the resource and may be greater than, equal to, or less than the cleared ICAP depending on the amount of capacity provided by each contributor.

Standby and Augmented Availability Charge

Stakeholders reiterated concerns regarding the design and intent of the Standby and Augmented Availability Charge in the May 3, 2022 Technical Panel feedback document. IESO continues to engage with stakeholders on a revised proposal that balances fairness with the intended objective of the design. A summary of the timing of these dedicated engagement touchpoints and how discussions have evolved is captured in the Stakeholder Engagement Timeline memo.

Point-in-Time

Stakeholders requested that the IESO provide examples of when an exemption to the point-in-time rule may need to be exercised for the implementation of Market Renewal and how the amendment would be written, and suggested that the point-in-time amendment identify specific criteria of application. It was also suggested that for the obligation period occurring when the Market Renewal Program goes live, stakeholders should be given the opportunity to review both the Market Rules that will be in effect before MPR as well as the Market Rules that will come into effect post-MRP, simultaneously in order to ensure alignment between the two.

IESO Response:

 Through the MRP, the day-ahead commitment process (DACP) is being replaced with the dayahead market (DAM). In doing this, the mechanics of offering capacity into the energy market will change and it will be necessary to reflect this change in updated rules and manuals to enable a CA participant to continue satisfying their obligation. In making the change, the following is an example of language that may be inserted into the rule itself to expressly state that it is an exception to the point-in-time rule:

"This section applies notwithstanding sections 18.1A.1 and 18.1A.2 of chapter 7 of the market rules"

- This is an example of a change made to the mechanics, or the "how", of the capacity obligation and is an example of the scope of changes this provision is meant to be used for. Changes to the underlying obligation or performance assessment are not in scope.
- The proposed timing of the MRP implementation is part way through the winter obligation period of the 2022 auction. At this time, it is uncertain if there is sufficient clarity on the MRP market rule and manual changes affecting the capacity auction. The proposed enhancement will effectively address this issue for the participant and the IESO in an open and transparent manner

Feedback Out of Scope of the 2022 Capacity Auction Enhancements

The feedback below was received through the Technical Panel invitation to stakeholders, but is considered outside of the scope of the 2022 capacity auction enhancements.

HDR Baseline Methodology

Stakeholders expressed a lack of support for the findings of the HDR Baseline Methodology Review conducted throughout 2021, particularly as it relates to a resource-level application of the In-day Adjustment Factor (IDAF).

IESO Response:

- IESO conducted a separate extensive engagement throughout 2021 that reviewed the accuracy of the current HDR baseline methodology against a set of alternative methodologies
- The review conclusively found that the IDAF increases the accuracy and integrity of the baseline in both resource- and contributor-level applications, as summarized in the December 15, 2021 Resource Adequacy engagement presentation
- IESO is open to further discussion with stakeholders if there are outstanding questions related to the findings of the review, however, the IESO is confident in the analysis and its alignment with the proposed performance threshold changes

HDR Market Participation Concerns

Stakeholders indicated performance thresholds for HDR resources should not be changed from 80% to 90% until other concerns are addressed.

- Changes to the performance thresholds were introduced in order to bring greater alignment in how the performance of different capacity resource types are assessed, while also recognizing their unique characteristics. To do this, the HDR threshold was reduced to 10%, and for other resource types a 5% threshold was introduced.
- IESO has heard other fundamental concerns regarding the market participation framework for HDR resources, including the lack of a formal outage approval process, and issues with the audits assessment framework. These concerns are outside the scope of the 2022 capacity auction enhancements, however we recognize they warrant further consideration and have committed to continuing coordinated discussions on these topics with the HDR community, as well as the relevant groups within the IESO.