

Technical Session – HDR Qualification and Performance Assessment

Meeting Notes

Date: September 22, 2022

Time: 1:30 PM EST

Facilitator: Dale Fitzgerald, Supervisor, Capacity Development & Integration

Attendees

Name	Organization
Selina Chang	Alectra Utilities
Bryan Crowe	Alectra Utilities
Janice Hodgson	Alectra Utilities
Alvin Zhang	Bruce Power
Paul Luukkonen	Customized Energy Solutions
Allison Miller	Enel X
Sarah Griffiths	Enel X
Lucas Born	EnPowered
Imtiaz Ahmed	Essex Energy
Patrick Casey	Essex Energy
Marc Robitaille	Evolugen
Karen Wharton	Great Circle Solar
Èveline Pelletier	HQ Energy Marketing
Charlie Recoskie	Iroquois Falls Power Corp
Francois Abdelnour	Ivaco Rolling Mills
Utilia Amaral	MarketStep Consulting

Name	Organization
Colton Pankhurst	Natural Resources Canada
Rob Coulbeck	Ontario Energy Association
Daniel Tadros	Ontario Power Generation
Rose Desantis	Ontario Power Generation
Syed Naqvi	Ontario Power Generation
Farhad Daruwala	PA Consulting
Avi Lipsitz	Power Advisory
Sarah Simmons	Power Advisory
Dave Forsyth	Rodan Energy Solutions
Roman Grod	Rodan Energy Solutions
Safouh Soufi	SMS Energy-Engineering Inc
Erika Fleming	Voltus Energy Canada
Michael Pohlod	Voltus Energy Canada
Katherine Goss	Workbench Energy
Aaron Lampe	Workbench Energy
Heather Sears	Workbench Energy
Dale Fitzgerald	IESO
Emma Ferner	IESO
Fahad Rashid	IESO
Jason Grbavac	IESO
Jeffrey Huang	IESO
Laura Zubyck	IESO
Mike Risavy	IESO
Tiberiu Abid	IESO
Vipul Agrawal	IESO

Welcome and Introductions – Jason Grbavac, Dale Fitzgerald

The IESO welcomed stakeholders to the meeting and provided an outline of the morning's agenda, which included discussing the hourly demand response (HDR) qualification methodology and standby availability charge, and a proposal to address large contributor forced outages in HDR performance assessment related to changes to performance assessment thresholds. The IESO also reiterated the objectives of the 2023 Capacity Auction Enhancements.

Discussion on HDR Contributor Outage Proposal – Jeffrey Huang, Tiberiu Abid

IESO provided an overview of Discussion Brief 2.1: HDR Performance Thresholds, which is posted to the Capacity Auction engagement page. Stakeholders expressed concern over activation events that occur over two consecutive days, during which a contributor is on forced outage on both days.

The IESO indicated the contributor could be removed from each of the activations, but that they would be treated as independent activations and the baseline would be calculated for each activation day in isolation.

Stakeholders are interested in why the proposed solution would not also apply to a multi-day planned outage, given there would be similar HDR baseline methodology impacts.

IESO has explored the question of the impact of forced outages and has concluded that because the information is known in advance, aggregators should have enough time to take appropriate action in these circumstances. IESO is open to further discussion regarding this concern, and asked if stakeholders could provide an illustrative example of how planned outages, and/or outages of different durations impact assessed performance.

Additional questions were raised regarding the application of charges if a contributor is on extended outage, whether the outage solution could be extended to the self-scheduled test framework, and how contributor outages would be addressed in the audit process. An edge case was also identified related to the aggregator not becoming aware of an outage until directly prior to an activation or after an activation.

IESO clarified an aggregator is still required to deliver on the obligation amount, and that if a contributor in its portfolio takes a planned outage, this is a risk that the aggregator must account for. IESO is open to further discussion on various edge cases that stakeholders would like to see addressed in the proposed solution, and agree that the audit will be an important aspect of the final outage solution design. Stakeholders were encouraged to bring forward illustrative examples.

IESO indicated interest in feedback on whether IESO is on the right path with this proposal in terms of addressing stakeholder's primary concerns related to contributor outages.

Discussion on HDR Qualification and the Standby Availability Charge – Fahad Rashid, Dale Fitzgerald

The IESO presented a recap of the general qualification methodology and a revised proposal for the Standby Availability Charge (SAC) as captured in Discussion Brief 1.1: HDR Qualification and Standby Availability Charge, which is posted to the Capacity Auction engagement page.

IESO summarized concerns related to the previous SAC proposal that caps the number of standby days on which the charge applies, citing that it risks resources not being available over the entirety of the obligation period, and as such the IESO cannot support a proposal that caps the number of times the SAC is applied. IESO also outlined rationale for not supporting the alternative proposal brought forward by stakeholders that leverages the approach used in ERCOT. This proposal does not meet the IESO's objective of ensuring qualified capacity can be relied upon at times of system need.

IESO confirmed the availability charge true-up payment is still part of the proposed enhancements.

Stakeholders raised concerns that not capping the SAC would result in a much higher risk profile than other Capacity Auction resources, and that the top 200 hours de-rate methodology for other Capacity Auction resources is also indicating that capacity is only needed in peak months, meaning there should not be an issue with limiting the SAC to peak months.

IESO indicated that there is also a chance HDR resources will have less financial exposure under the revised proposal, and that the proposal is meant to incent the right behaviour while recognizing it can't satisfy all scenarios to reduce risk.

Stakeholders suggested that a version of the ERCOT structure could be used to derive a pre-auction availability de-rate for HDRs. In the pre-auction period, the IESO could request that aggregators indicate who their contributors were in the previous year and what their obligation was, then verify their availability during the obligation period and de-rate them accordingly. A fleet average could be applied to new resources, and for an HDR resource that does not maintain their bids through to real-time, the lowest of the bids offered in each of the timeframes could be used.

IESO responded that a key difference with dispatchable loads is that their bids are used to make a schedule. For HDR resources, there is no need to follow a schedule unless they are placed on standby which means that the bids aren't as reliable. In addition, in terms of the ERCOT proposal, the consumption information for a contributor does not equate to their curtailable capacity.

Stakeholders added that in ERCOT, a maximum baseload is applied at a given facility, and the load must be above that maximum baseload sufficiently to correspond to the curtailment capability.

A participant commented that the biggest issue with the revised proposal is that it will incent more bad behaviour by increasing the penalty if bids are updated to the true capability. They added that the Market Surveillance Panel (MSP) criticized the HDR participation model for incenting more capacity to clear the auction than resources are actually capable of providing. The performance adjustment factor will largely address the MSP concern, but the standby availability charge has the potential to drive more bad behaviour by resources not updating bids in real-time.

Stakeholders requested clarity on whether standby availability trigger will be reviewed on an annual basis given the linkage to the SAC design, noting that the proposed \$200 trigger price is too low and resources will continue to be put on standby more than the IESO has assumed, particularly during the winter obligation period.

IESO confirmed the standby trigger will be reviewed to ensure HDR resources are not being put on standby more than they should be. If the number of times a resource is placed on standby remains reasonable, then the standby availability charge continues to work as intended.

A participant commented that the IESO is trying to prevent HDR resources from removing bids in advance of reliability events, but said the real problem to solve is preventing participants from clearing more capacity in the auction than they are capable of providing.

The IESO thanked the participant for their comment. They then asked if participants could provide their feedback on the possibility of using a pre-obligation period test to determine the capability of the resource to deliver the capacity.

Stakeholders confirmed a preference for the application of performance factor penalties within the time period that the test was conducted, to align with contract and commercial exposures. Stakeholders indicated that this test could be feasible within the first month of the obligation period, but are interested in how this differs from the Performance Adjustment Factor (PAF) mechanism.

IESO indicated the objective of such a test would differ from the PAF by confirming within the obligation period what a resource's actual capability is, that capacity can be more confidently relied on for delivery in the real-time market.

Stakeholders suggested the IESO consider how all the various charges, performance factors, and other aspects of the capacity auction enhancements interact with each other.

IESO requested stakeholders articulate those linkages and any identified impacts in written feedback.

IESO concluded the technical session by thanking stakeholders for their participation and noting the action items the IESO would follow up on, which are listed below:

- Post the feedback document
- Post a summary of the meeting