Minutes of the IESO Technical Panel Meeting

Meeting date: 11/July/2023 Meeting time: 9:00 a.m. – 9:17 a.m. Meeting location: In-person and Video Conference Chair/Sponsor: Michael Lyle Scribe: Trisha Hickson, IESO

Please report any suggested comments/edits by email to engagement@ieso.ca.

| Invitees | Representing | Attendance Status Attended, Regrets |
|--------------------|--------------------------------------|--|
| Jason Chee-Aloy | Renewable Generators | Attended |
| Ron Collins | Energy Related Businesses & Services | Attended |
| Rob Coulbeck | Importers/Exporters | Attended |
| Emma Coyle | Market Participant Generators | Regrets |
| Dave Forsyth | Market Participant Consumers | Attended |
| Sarah Griffiths | Demand Response | Attended |
| Jennifer Jayapalan | Energy Storage | Attended |
| Indra Maharjan | Market Participant Consumers | Attended |
| Nick Papanicolaou | Market Participant Consumers | Attended |
| Forrest Pengra | Residential Consumers | Attended |
| Robert Reinmuller | Transmitters | Attended |
| Joe Saunders | Distributors | Attended |
| Vlad Urukov | Market Participant Generators | Attended |
| David Short | IESO | Attended |
| Michael Lyle | Chair | Regrets |



| Invitees | Representing | Attendance Status Attended, Regrets |
|---------------------------------|--------------|--|
| Secretariat | | |
| Trisha Hickson | IESO | Attended |
| IESO Presenters | | |
| Adam Cumming Dale Fitzgerald | IESO | Attended |

Agenda Item 1: Introduction and Administration

Trisha Hickson, IESO, welcomed everyone joining the meeting.

The meeting agenda was approved on a motion by Forest Pengra.

The June 13 meeting minutes were approved on a motion by Robert Reinmuller

Introductory Remarks from the Chair:

David Short was acting chair in absence of Michael Lyle. Dave welcomed all members and reminded the panel of the upcoming break in August and the panel will reconviene on September 12, 2023.

Agenda Item 2: Engagement Update

Ms. Hickson reviewed the prospective Technical Panel schedule provided as part of the meeting materials and noted that the monthly engagement update would be posted to the IESO website in the coming days. It was noted that the June IESO Engagement Days meetings will include two items, including MRP to review the draft Market & System Operations batch of Market Rule and Market Manual amendments and York Region Non-Wires Alternatives Demonstration.

Agenda Item 3: Capacity Auction Enhancements - Stream 2 Vote to Post

Adam Cumming, IESO provided an overview of the Stream 2 Capacity Auction Enhancements, noting they consist of two main items. The first being the Performance Adjustment Factor (PAF). As previously discussed with the panel, Mr. Cumming explained that beginning with the 2023 Capacity Auction, the IESO will be using a pre-auction capacity qualification process to determine an Unforced Capacity (UCAP) value that can be offered into the auction from each resource. Capacity qualification methodologies have been determined based on industry best practices and stakeholder input for each resource type eligible to participate in the auction. As part of capacity qualification, a resource's UCAP value, which represents the MW quantity, that each resource is expected to be able to contribute to the resource adequacy, will be calculated using resource-specific performance and availability data. This calculation will include the use of a seasonal PAF that will incorporate capacity test performance data from the most recent applicable seasonal obligation period's capacity test. To

summarize, Mr. Cumming noted that for each obligation period during the obligation, each resource will be tested to see if they are capable of performing to their Installed Capacity (ICAP) value. Resources that are capable will not have a PAF applied. Resources that fail a capacity test will have a PAF calculated based on their test results and that will then be applied during the following year's capacity qualification process. Mr. Cumming referenced ways to avoid this which are passing the test and by choosing to self qualify in the following obligation periods by reducing your ICAP to the value previously showed as capable of performing during the previous year's capacity test.

Mr. Cumming introduced the second portion of the proposed amendments to amend the portion of chapter 9 (Settlements Chapter) associated with the Capacity Auction. Mr. Cumming explained this is being done to consolidate settlement rules, formulas, and associated variables into the Market Rules. Consolidating this information is being done in response to stakeholder and Technical Panel member requests, and will improve clarity and the presentation of this information to participants.

Mr. Cumming noted that the draft amendments including the redline market rules and manuals were provided to stakeholders and no feedback was received. However, during the Technical Panel posting of the Capacity Auction Stream 1 Amendments, AEMA submitted stakeholder feedback which related to the PAF. Mr. Cumming addressed the following feedback as it relates to the Stream 2 Enhancements:

• AEMA noted that where an HDR aggregator receives a poor PAF they may run the risk that their contributors would choose to leave their portfolio in favour of an aggregator with a less significant PAF.

In reponse, Mr. Cumming noted the IESO continues to stress the point that contributor management is a key responsibility of Hourly Demand Response (HDR) aggregators. HDR aggregators are responsible for managing their contributors and for ensuring that their contributors are able to provide the capacity required. The PAF design encourages HDR aggregators and all other capacity auction participants to ensure they are able to perform to their submitted ICAP values.

• The second item noted by AEMA, is that *"if one contributor has an outage that is not recognized by the IESO, during the capacity test, despite performing in other events throughout the capacity period, the entire portfolio would face a significant derate for years."*

In response, Mr. Cumming noted the PAF derived from a capacity test will only be applicable to the following year's qualification for the same obligation period, noting it doesn't follow for years, it's a single occurance. The summer test will be applicable to the following summer and the winter will be applicable to the following winter's obligation period. Mr. Cumming noted the IESO has introduced both a contributor outage management system to help alleviate the impact of a potential contributor outage and has revised the testing framework to give increased opportunity to participants to perform well during the capacity test. This includes providing 10 days' prior notice to the capacity test week, and allowing participants a five day window to self schedule their tests in order to ensure all contributors are capable and ready to perform during that period.

• The third item noted by AEMA is a request to have multiple aggregations per electrical zone.

In response, Mr. Cumming noted that while this was briefly discussed during Capacity Auction stakeholder engagement sessions, it is not something that was able to be accommodated at this time.

• The fourth item submitted by the AEMA "AEMA continues to advocate for a distinction between capacity and energy delivered. All other markets in North America distinguish between these two concepts and we believe it is important for the IESO to do the same. By equating energy delivered and capacity delivered, the IESO is undercounting the capacity provided by its HDR resources and increasing performance risk for aggregators in the province."

In response, Mr. Cumming notes this item was not raised during the stakeholder engagement process and explained that the IESO clearly defines Auction Capacity in the Market Rules as: an amount in megawatts of electricity available to be provided to the IESO-controlled grid, by capacity market participants associated with a capacity auction. The IESO tests that capability by having capacity auction participants perform a Capacity Auction Capacity Test where they must demonstrate ability to deliver energy within the energy market.

Mr. Cumming then addressed a final item pointing to corrections the IESO is making to Chapter 9 and 11 related to the implementation of the RSS amendments. Mr. Cumming noted there were three instances where incorrect cross references were present; two in Chapter 9 and one in Chapter 11. Corrections were made to these cross references.

Mr. Cumming closed his remarks by thanking members Vlad Urukov and Forrest Pengra for their timely review of the amendments and noted a complete review of their feedback is pending and changes will be made as required.

Technical Panel Member Dave Forsyth commented on AEMA's feedback regarding advocating for a distinction between capacity and energy delivered. Mr. Forsyth noted this issue has been brought forward many times in stakeholder engagement and the issue AEMA has is with the Market Rule itself and the IESO has not satisfied the question by reiterating the Market Rule. Mr. Forsyth mentioned that he believes AEMA will continue to raise this issue as they would like Market Rule amended.

In response to Mr. Forsyth, Dale Fitzgerald, IESO acknowledged reference to the issue being brought up in stakeholder engagement and noted the issue for future discussion.

On a motion by Indra Maharjan, the Technical Panel voted to post for broader stakeholder engagement the Capacity Auction Enhancments Market Rule amendments to the IESO Board of Directors.

Other Business

No other business was raised.

Adjournment

The meeting adjourned at 9:20 a.m. The next meeting will be held on September 12, 2023.

| Date | Action | Status | Comments |
|-------------------|---|--------|---|
| March 23, 2021 | In relation to MR-0448-R00 market rule amendments, the IESO will periodically review the availability of error and omissions insurance for negligence. | Open | Update provided during November 2021 meeting |