

Memorandum

Independent Electricity System Operator

1600-120 Adelaide Street West Toronto, ON M5H 1T1 t 416.967.7474

www.ieso.ca

To: Technical Panel

From: Samantha Tam

Date: April 13, 2021

Re: MR-00450, MR-00451, MR-00453, MR-00461: Market Renewal Program: Market

Entry and Prudential Security

The IESO proposes to amend the market rules to enable Participant Authorization, Facility Registration and Prudential Support (collectively "Batch 1") for the Market Renewal Program. The proposed changes are based on the MRP Implementation Stakeholder Engagement.

At the March 23rd Technical Panel meeting, Technical Panel members voted to post the proposed market rule amendments for stakeholder review and comment. The amendments were posted on the Proposed Market Rule Amendments webpage from March 25th to April 6th. Two sets of written comments were received from Ontario Power Generation (OPG) and Capital Power.

The IESO has made changes in response to Technical Panel comments and written feedback received, which are summarized below with IESO responses. Changes made to the market rule amendment proposals for MR-00451 (Facility Registration) and MR-00461 (Batch 1 Definitions) have been highlighted in yellow. No changes were made to MR-00450 (Participant Authorization) and MR-00453 (Prudential Support).

A summary of Technical Panel comments from the March 23rd Technical Panel meeting, OPG's and Capital Power's written submissions and IESO responses are provided below:

<u>Market Participant Consumers Representative [David Forsyth] Comments and IESO Responses</u>

1. Chapter 7, section 2.2.25: Why is there no provision on changing from a dispatchable load to a price responsive load?

IESO Response

This is a potential design gap and after further analysis, the IESO will consider whether additional provisions are necessary for changing from a dispatchable load to a price responsive load. The IESO will bring resolution to this issue and any amendments to the market rules at a subsequent Technical Panel meeting via a future batch of market rule amendments.

2. Chapter 7, section 2.2.26: For situations where there is an issue at a plant, such as the need to make repairs which would require a dispatchable load to become non-dispatchable, proposed section 2.2.26 appears to disallow a return to dispatchable load status for at least 12 months. This is problematic.

IESO Response

Under the scenario described, a dispatchable load facility that requires any one or more of their associated load resources to temporarily become non-dispatchable can effectively do so via their bids. There is no requirement for the facility to change their registration status to non-dispatchable and then back to dispatchable after the repairs are complete. A dispatchable load facility can identify all or a portion of their consumption as non-dispatchable by either: (i) submitting dispatch data for the non-dispatchable portion at the maximum market clearing price, or (ii) by removing all bids for the hours in which it wishes to be considered non-dispatchable.

A load resource currently has this ability under the existing authority of section 3.3.18¹ of Chapter 7, and as further detailed in Market Manual 4.2 – Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets. As part of a future batch of market rule amendments (Offers, Bids and Data Inputs and Grid and Market Operations Integration), "notwithstanding section 2.2.26″ will be added to existing section 3.3.18. This cross reference will specify that the ability to temporarily signal non-dispatchable status will remain, and will not require a load resource to change its registration status in accordance with proposed sections 2.2.25 and 2.2.26.

3. The proposed chapter 11 definition for "price responsive load" seems to say a market participant must submit bids for energy into the day-ahead market. Can we change it to "... a market participant who is authorized to submit bids for energy into the day-ahead market..."?

IESO Response

The definition of "price responsive load" has been amended as requested.

<u>Market Participants Generators Representative [Vlad Urukov] Comments and IESO</u> Responses

1. Chapter 7, sections 2.1.1.4, 2.2.3C, and 2.2.6A are proposed market rules related to market participant documentation requirements to the IESO. Request to include the words "applicable" or "relevant" in relation to the documentation requirements in order to limit the scope of documentation that the IESO may request.

IESO Response

The IESO has made the following changes:

- Section 2.1.1.4 "all materials" has been replaced with "all relevant materials";
- Section 2.2.3C this proposed section has been deleted in its entirety please see Emma Coyle/Capital Power question #1 and IESO response;
- Section 2.2.6A "with any supporting documentation" has been replaced with "in addition to any relevant documentation."

¹ Chapter 7, section 3.3.18 – A *registered market participant* may, for any one or more of its *registered facilities* that is a *dispatchable load*, identify all or a portion of the consumption at such *registered facilities* as *non-dispatchable load* by submitting *dispatch data* in accordance with the applicable *market manual*.

2. Chapter 7, sections 2.2.8.1, 2.2.7.5 use the language "trade-off function." Suggestion to either remove this term if not applicable to registration, or define it in Chapter 11.

IESO Response

The trade-off function is used by the existing dispatch scheduling and pricing process, and relates to the co-optimization of energy and operating reserve. The term 'trade-off function' is utilized as an undefined term in the existing market rules. The IESO will review the use of the term, and the benefits of defining it, as part of a future batch (Calculation Engines or Offers, Bids and Data Inputs and Grid and Market Operations Integration).

3. Chapter 7, section 2: The proposed amendments to the registration section in Chapter 7, section 2 use many variations such as "facility or any associated resource, as the case may be," "facility or any associated resource," and "facility and its associated resource." Please review to see if the language could be more consistent. Will all facilities have a corresponding resource?

IESO Response

In response to this question, the IESO reviewed section 2 for consistency. Sections 2.2.6.1 and 2.2.6.7 of Chapter 7 were amended from "its associated resources" to "any associated resources" to indicate that those provisions may pertain to a facility as well as a resource, if applicable. Furthermore, the IESO confirmed that the proposed market rules consistently capture the linkage between equipment and the resources that model that equipment to participate in the IESO-administered markets with the term "associated."

Correction from verbal response given at the March 23rd Technical Panel meeting: A facility does not have to have a corresponding resource. A facility may constitute types of equipment, such as transformers, which are not modelled by a resource, as defined in Chapter 11. However, generation units are modelled in the system as generation resources except for some embedded units that are not modelled by resources.

4. Chapter 7, section 2.2.6H time-lag: Suggestion to put in the hydro-electric section and group by resource type if possible. Does "time lag" apply to a non-dispatchable resource?

IESO Response

The IESO confirms that "time lag" applies to dispatchable hydroelectric generation resources only, and it has been relocated to Chapter 7, section 2.2.6A.5, grouped with the other optional hydroelectric registration parameters. The previous version of the amendment proposal had erroneously listed the optional parameter for time lag as a mandatory parameter in proposed sections 2.2.6H/2.2.6H.1.

Section 2.2.6H has been deleted in its entirety, and the requirement for period of steady operation has been relocated to section 2.2.6K, which lists all the mandatory registration parameters for a dispatchable generation resource.

5. The chapter 11 defined term for "shared daily energy limit" is at the unit level, whereas the detailed design specifies that this parameter is at the resource level. Please confirm intent and whether the defined term should be at the unit or resource level.

IESO Response

This registration parameter is applicable at the resource level. The definition has been revised by removing the reference to generation units by deleting "multiple generation units for one or."

6. Chapter 7, section 2.2.3C: Suggest wording such as "reasonably conform".

IESO Response

Proposed section 2.2.3C has been deleted in its entirety – please see Emma Coyle/Capital Power question #1 and IESO response.

Ontario Power Generation - Additional written comments

7. Market Control Entity (MCE): MCE is not defined in Chapter 11 of the market rules, but is referenced throughout Chapter 7 Facility Registration. OPG notes that the Market Power Mitigation and Facility Registration Detailed Design Documents have defined the concept of MCE inconsistently across these design documents. The definition in section 3.9.2 of the Market Power Mitigation document describes an MCE as an entity who "...is entitled to receive more than 50 per cent of the amounts paid to the market participant in respect of all energy and operating reserve transacted through the energy and operating reserve markets." This text is duplicated in section 3.6.1 of the Facility Registration document, but with a threshold of 10 per cent. The same sections contain identical threshold inconsistencies regarding the ability of an entity to elect directors and the share of profits received by entities (i.e., 50 per cent threshold in the MPM document, 10 per cent threshold in the Facility Registration document). The IESO should provide a consistent central definition of the MCE to allow MPs to accurately assess the market rules and design.

IESO Response

The IESO will look into this discrepancy. A definition for market control entity will be provided as part of a future batch (Market Power Mitigation) for stakeholder and Technical Panel review.

8. Resource: Please confirm whether the term "resource" includes energy storage resources. In its current state the definition refers only to generating units, loads, and boundary entities.

IESO Response

The IESO is currently working on the integration of energy storage with Market Renewal, and will stakeholder the corresponding market rule amendments and market manuals with stakeholders and the Technical Panel as part of a subsequent batch.

9. The IESO should consider broadening the definition of shared daily energy limit to include resources/units that share a tailrace, perhaps as follows: "Shared daily energy limit means a registration parameter that indicates whether multiple generation units for one or multiple dispatchable hydroelectric generation resources registered by the same market participant draw water from the same forebay or are located such that their combined outflows may be limited or required due to their effect on total flows downstream."

IESO Response

The IESO is of the view that OPG's proposed edits to the definition of "shared daily energy limit" is unnecessary. The definition that has been introduced to the Technical Panel,

reproduced below (the "Proposed Definition"), accurately and completely captures how the registration parameter will be used by the IESO and market participants. Specifically, the interplay of the new registration parameter "Shared Daily Energy Limit" with the daily dispatch data parameter "Maximum Daily Energy Limit" together with other dispatch data parameters available to hydroelectric resources in the future energy market provides significant flexibility to market participant management of water, while providing the IESO the ability to economically optimize the scheduling and dispatch of energy and operating reserve.

Proposed Definition:

shared daily energy limit means a registration parameter that indicates whether multiple dispatchable hydroelectric generation resources registered by the same market participant draw water from the same forebay;

10. Section 2.2.3c states: "The IESO may reject values submitted by a market participant in accordance with this section 2.2 if the IESO determines that the facility-specific or resource-specific information submitted does not conform to the technical capabilities of the facility or any associated resources." During the March 23, 2021 Technical Panel meeting, the IESO explained that section 2.2.3c was being added to "clarify" the intent of an existing rule in Chapter 7 Section 2.2.3.2, which indicates that the IESO will approve a request to register a facility if "...the IESO is satisfied on reasonable grounds that the facility is capable of operating as described in the registration information or as otherwise provided by the market rules in respect of the relevant physical service". OPG suggests that if 2.2.3c is only intended to clarify the language in 2.2.3.2, then perhaps the two rules could be harmonized into one rule, to avoid redundancy.

IESO Response

Proposed section 2.2.3C has been deleted in its entirety – please see Emma Coyle/Capital Power question #1 and IESO response.

<u>Transmitters Representative [Robert Reinmuller] Comments and IESO Response</u>

1. Chapter 7 has many amendments to replace facility with the term resource. The Ontario Energy Board (OEB) has very distinct connection agreement requirements for connecting generation facilities and loads. Changes to section 2.2.3 of chapter 7 will force market participants such as local distribution companies (LDCs) to update all their connection agreements. We need to figure out any impacts to OEB agreements resulting from these market rule amendments and use consistent wording across the industry.

IESO Response

The IESO and the OEB's Technical Panel Observer met with the Technical Panel member to better understand the nature of their concern and the extent to which it lies within the OEB's purview. The Technical Panel member indicated that no specific issues related to the Batch 1 changes and potential misalignment with any OEB related connection agreements have been identified to date. The general concern of potential impacts to OEB agreements is a result of challenges over the past few years of incorporating storage resources into existing connection agreements, and the lack of a standard form of agreement for storage.

The IESO encourages stakeholders and the Technical Panel to continue to raise specific challenges, discrepancies, or misalignments between any proposed market rule amendments and OEB agreements or mandates. The IESO, in coordination with the OEB

will continue the process of looking into any specific issues through discussions with stakeholders and Technical Panel members as soon as a specific issue is raised.

<u>Market Participant Generator Representative [Emma Coyle] Comments and IESO Response</u>

1. If Chapter 7, section 2.2.3C is used to make explicit the current process by expanding on section 2.2.3.2, why do we not use the same language as that of section 2.2.3.2? What other parts of the market rules give IESO the authority to reject market participant submitted values that do not conform to technical capabilities? Section 2.2.3C takes away the clarity.

Capital Power Written Submission (further comments on section 2.2.3C):

Capital Power suggests that any such pre-existing requirements must be explicitly identified and objectively understood as consistent with the proposed amendment, and that it is insufficient to rely on allusions to a requirement sought to be clarified through

identified and objectively understood as consistent with the proposed amendment, and that it is insufficient to rely on allusions to a requirement sought to be clarified through amendment. Where the market rules do not objectively establish the meaning of a requirement, or the interpretation of a section of the market rule is disputed, Capital Power understands the dispute resolution process to be the appropriate process through which questions of interpretation should be adjudicated.

As drafted, section 2.2.3C appears to expand the scope of the IESO's discretion. Capital Power would appreciate further detail from the IESO regarding any pre-existing obligations that objectively establish the IESO's discretion to reject facility registration information where it does not conform to the technical capabilities of the facility.

IESO Response

The IESO has considered the comments received on proposed section 2.2.3C, and has decided to delete it in its entirety. The IESO is of the view the additional wording proposed in section 2.2.3C is unnecessary.

Panel Action and Next Steps

The IESO recommends that the Technical Panel vote to provisionally recommend the proposed market rule amendments MR-00450, MR-00451, MR-00453, and MR-00461 to the IESO Board for provisional approval at its June 16, 2021 meeting.

Accompanying Materials

- Market Rule Amendment Proposals:
 - MR-00450-R00: Participant Authorization
 - MR-00451-R00: Facility Registration
 - MR-00453-R00: Prudential Security
 - MR-00461-R00: Batch 1 Definitions
- Written Submission OPG
- Written Submission Capital Power

Samantha Tam