

## Market Rule Amendment Proposal Form

### Part 1 - Market Rule Information

Identification No.:	MR-00474-R00
Subject:	Enabling the Co-located Hybrid Model
Title:	Enabling the Co-located Hybrid Model
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	Chapter 7
Appendix:	N/A
Sections:	3
Sub-sections proposed for amending:	3.5.6, 3.5.6A & 3.5.6B
Current Market Rules Baseline:	48.1

### Part 2 - Proposal History

Version	Reason for Issuing	Version Date
1.0	Issued for internal impact assessment	September 28, 2022
2.0	Issued for stakeholder review	October 14, 2022
3.0	Issued for Technical Panel Review	January 17, 2023
4.0	Issued for Technical Panel Review	February 14, 2023
5.0	Recommended to IESO Board by Technical Panel	February 21, 2023

Approved Amendment Publication Date:

Approved Amendment Effective Date:

## Part 3 - Explanation for Proposed Amendment

Provide a brief description that includes some or all of the following points:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

### Summary

Where there is more than one facility behind a connection point to the grid, it is possible that an individual facility or the combination of facilities could have more injection or withdrawal capability than the maximum allowed quantity. The IESO is proposing to provide market participants with the flexibility to manage multiple facilities behind a connection point where the maximum capability of those facilities is in excess of the maximum allowed quantity. Market participants will be required to manage their bids and offers so that the total or net schedule for all facilities is within the maximum allowed quantity.

### Background

To be approved to participate in the IESO markets, potential market participants submit connection applications to the IESO for their facility. Within the Connection Assessment & Approval (CAA) process, connection applicants indicate how they are expecting to operate their facility and the quantity they expect to inject or withdraw at the connection point.

The approved connection point quantity is related to the facility size or other limits such as the capability of the IESO-controlled grid equipment or the connection applicant's own equipment, which could be damaged if the injections/withdrawals exceeded the capability. Under the CAA, the IESO may require automatic safety control mechanisms (i.e. automatic run back or trip requirements) or specify other conditions to ensure safety and reliability of the grid.

### Discussion

3.5.6A & 3.5.6B – New subsections have been added which describe when multiple facilities that are registered to the same registered market participant and connected to the same connection point, that they will be able to submit offers and bids based on the net injections and withdrawals for all generation facilities and electricity storage facilities.

3.5.6A specifies the largest quantity in any energy offer or energy bid where none of the facilities are providing ancillary services or operating reserve.

3.5.6B specifies the largest quantity in any energy offer or energy bid where any of the facilities are providing ancillary services or operating reserve.

## Part 4 - Proposed Amendment

### Chapter 7

3.5.6 The largest quantity in any *energy offer* or *energy bid* for any *dispatch hour* must be at least 1.0 MWh but shall not exceed the lesser of:

3.5.6.1 the maximum output of *energy* in an hour indicated in the registration information for the relevant *registered facility*;

3.5.6.2 the maximum quantity of *energy* that can be supplied (for an *energy offer*) or taken (for an *energy bid*) in that *dispatch hour* by the *registered facility*, as estimated by the *registered market participant* for that *registered facility*; or

3.5.6.3 the maximum allowed injection (for an *energy offer*) or withdrawal (for an *energy bid*) in that *dispatch hour* through the relevant *connection point*, as limited by the lesser of:

3.5.6.3.1 ~~(i)~~ the capacity of any radial line connecting the *registered facility* to the *connection point*;

3.5.6.3.2 ~~(ii)~~ the maximum injection or withdrawal as specified in the *connection agreement* applicable to the *registered facility*; or

3.5.6.3.3 ~~(iii)~~ the maximum injection or withdrawal otherwise permitted by the relevant *transmitter*.

3.5.6A Where one or more *electricity storage facilities* and one or more other *generation facilities* are all:

3.5.6A.1 connected at the same *connection point*;

3.5.6A.2 registered to the same *registered market participant*, and

3.5.6A.3 none of the *facilities* are providing *contracted ancillary services* or participating in the *operating reserve market*;

section 3.5.6 shall not apply. Instead, the largest quantity in any *energy offer* or *energy bid* for any *dispatch hour* for each *facility* must be at least 1.0 MWh but shall not exceed the lesser of:

3.5.6A.4 the maximum output of *energy* in an hour indicated in the registration information for the relevant *registered facility*;

3.5.6A.5 the maximum quantity of *energy* that can be supplied (for an *energy offer*) or taken (for an *energy bid*) in that *dispatch hour* by the *registered facility*, as estimated by the *registered market participant* for that *registered facility*; or

3.5.6A.6 the maximum allowed injection (for an *energy offer*) or withdrawal (for an *energy bid*) in that *dispatch hour* through the relevant *connection point*, as limited by the lesser of:

3.5.6A.6.1 the capacity of any radial line connecting the *registered facility* to the *connection point*; or

3.5.6A.6.2 the maximum injection or withdrawal as specified in the *connection agreements* applicable to the *registered facilities* or to the maximum injection or withdrawal otherwise permitted by the relevant *transmitter*, calculated as the total net injections and withdrawals for all *generation facilities* and *electricity storage facilities* registered to the same *registered market participant* at the same *connection point*.;

3.5.6B Where one or more *electricity storage facilities* and one or more other *generation facilities* are all:

3.5.6B.1 connected at the same *connection point*;

3.5.6B.2 registered to the same *registered market participant*, and

3.5.6B.3 any of the *facilities* are providing *contracted ancillary services* or participating in the *operating reserve market*;

sections 3.5.6 and 3.5.6A shall not apply. Instead, the largest quantity in any *energy offer* or *energy bid* for any *dispatch hour* for each *facility* must be at least 1.0 MWh but shall not exceed the lesser of:

3.5.6B.4 the maximum output of *energy* in an hour indicated in the registration information for the relevant *registered facility*;

3.5.6B.5 the maximum quantity of *energy* that can be supplied (for an *energy offer*) or taken (for an *energy bid*) in that *dispatch hour* by the *registered facility*, as estimated by the *registered market participant* for that *registered facility*; or

3.5.6B.6 the maximum allowed injection (for an *energy offer*) or withdrawal (for an *energy bid*) in that *dispatch hour* through the relevant *connection point*, as limited by the lesser of:

3.5.6B.6.1 the capacity of any radial line connecting the *registered facility* to the *connection point*; or

3.5.6B.6.2 the maximum injection or withdrawal as specified in the *connection agreement* applicable to the *registered facility* or the maximum injection or withdrawal otherwise permitted by the relevant *transmitter*, and the sum of all *energy offers* or the sum of all *energy bids* from all *facilities* shall not exceed these limits.