

Market Rule Amendment Proposal Form

Part 1 - Market Rule Information

Identification No.:	MR-00461-R04
Subject:	Market Renewal Program – Market Settlements, Metering, Market Billing and Funds Administration: Definitions
Title:	Market Renewal Program – Market Settlements, Metering, Market Billing and Funds Administration: Definitions
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input checked="" type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	11
Appendix:	
Sections:	
Sub-sections proposed for amending:	
Current Market Rules Baseline:	

Part 2 - Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	December 1, 2022
<u>2.0</u>	<u>Draft following Stakeholder Review Period</u>	<u>April 24, 2023</u>

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

Background

Discussion

Part 4 - Proposed Amendment

Definitions

advanced pre-dispatch operational commitment means a minimum scheduling constraint advancement established by the *IESO* to a *GOG-eligible resource's minimum loading point*, that applies for a duration of at least one hour in advance of an existing *day-ahead operational commitment* or *stand-alone pre-dispatch operational commitment* based on the *binding pre-dispatch advisory schedule*, during the applicable hours specified by the *IESO* pursuant to MR Ch.7 s.5B.2.2.1;

binding pre-dispatch advisory schedule means the *pre-dispatch schedule* for a *GOG-eligible resource* (i) that is greater than or equal to its *minimum loading point* excluding the hours scheduled to reflect the *ramp up energy to minimum loading point*, and (ii) that is the basis for a *start-up notice* for a *stand-alone pre-dispatch operational commitment* or *advanced pre-dispatch operational commitment*;

class r reserve means *operating reserve* of class *r*, where *r* = 1 denotes *spinning ten-minute operating reserve*, *r* = 2 denotes *non-spinning ten-minute operating reserve*, and *r* = 3 denotes *thirty minute operating reserve*;

day-ahead commitment period means the set of contiguous *settlement hours* described in MR Ch.9, s.4.4.1.1(c);

day-ahead market external congestion rent means, in respect of an *intertie zone* and a *settlement hour*, the total *day-ahead market external congestion* collected by the *IESO* for all *boundary entity resources*, determined as the *day-ahead market quantity of energy* scheduled for withdrawal minus the *day-ahead market quantity of energy* scheduled for injection, multiplied

by the *day-ahead market price of external congestion* (DAM_PEC_hⁱ) as defined in MR Ch. 9 App 9.2;

day-ahead operational commitment means a minimum scheduling constraint established by the IESO to a GOG-eligible resource's minimum loading point based on the *day-ahead schedule* to respect the resource's minimum generation block run-time during the hours specified by the IESO pursuant to MR Ch. 7, s. 4B.2.2.2;

day-ahead operational schedule means the hours in a GOG-eligible resource's *day-ahead schedule* that are greater than or equal to the *minimum loading point* excluding the hours scheduled to reflect the ramp up energy to minimum loading point;

extended pre-dispatch operational commitment means a minimum scheduling constraint extension established by the IESO to a GOG-eligible resource's minimum loading point for a duration of one hour immediately following an existing *day-ahead operational commitment*, *stand-alone pre-dispatch operational commitment* or a previously *extended pre-dispatch operational commitment*, based on a *pre-dispatch schedule*, during the hours specified by the IESO pursuant to MR Ch. 7, s. 5B.2.2.2;

generator offer guarantee eligible resource or *GOG-eligible resource* means a *dispatchable non-quick start resource*:

- (i) with a registered *elapsed time to dispatch* greater than one hour;
- (ii) with a registered *minimum loading point* greater than 0 MW;
- (iii) with a registered *minimum generation block run-time* greater than one hour; and
- (iv) its primary or secondary fuel source is not uranium.

generator failure means the occurrence of a failure determined in accordance with MR Ch. 9, s. 4.10.4 or s. 4.10.7, for a GOG-eligible resource not associated with a *pseudo-unit* or a GOG-eligible resource associated with a *pseudo-unit*, respectively;

interchange schedule means the scheduled *intertie* flow between the IESO-controlled grid and a neighbouring *control area*, determined by the IESO in accordance with MR Ch. 7, s. 6.1.3;

linked wheeling through transaction means a set of import and export *energy* transactions scheduled in the *day-ahead market* or the *real-time market* for *boundary entity resources*, that have been linked by the relevant *market participant* pursuant to MR Ch. 7, s. 3.5.8.2;

market price means the price of *energy* or *operating reserve* determined in the *real-time market*, in the *day-ahead market*, or the price of *auction capacity* determined in the *capacity auction* in accordance with the provisions of MR Ch. 7, or an *administrative price*, where applicable;

metered market participant means, in respect of a *registered wholesale meter*, the *market participant* designated as the *metered market participant* for the *resource(s)* associated with that *registered wholesale meter* in accordance with MR Ch. 9;

Minister means the Minister of Energy or such member of the Executive Council that may be assigned the administration of the *Electricity Act, 1998* under the *Executive Council Act, 1990*;

non-committable resource means a *dispatchable load*, a *dispatchable electricity storage resource*, or a *dispatchable generation resource* that is not a *GOG-eligible resource*;

pre-dispatch operational commitment means (i) a *stand-alone pre dispatch operational commitment*; (ii) an *advancement pre-dispatch operational commitment*; or (iii) an *extension pre-dispatch operational commitment*;

price-quantity pair means a price and an associated quantity that define a “step” in an *offer* or *bid curve*;

real-time commitment period means the set of contiguous *settlement hours* described in MR Ch. 9, s. 4.5.1.1(c);

real-time market or *RTM* means any one of the markets operated by the *IESO* for *energy* or *operating reserve* pursuant to Chapter 7, other than the *day-ahead market*;

real-time reliability commitment period means the set of contiguous *settlement hours* described in MR Ch. 9, s. 4.5.1.1(d);

reliability commitment means a minimum scheduling constraint established manually by the *IESO* to at least a *GOG-eligible resource’s minimum loading point* in order to maintain the *reliable* operation of the *IESO-controlled grid*, as determined by the *IESO*;

stand-alone pre-dispatch operational commitment means a minimum scheduling constraint established by the *IESO* to a *GOG eligible resource’s minimum loading point* based on the *binding pre-dispatch advisory schedule* to respect the *resource’s minimum generation block run-time* during the applicable hours specified by the *IESO* pursuant to MR Ch.7, s. 5B.2.2.5;

start-up notice means the notification issued to a *GOG-eligible resource* in accordance with MR Ch. 7, s. 10.1 containing the *GOG-eligible resource’s* start time, synchronization time, and time to reach the *minimum loading point*;

TR zone means the *IESO control area* or an *intertie zone* in respect of which the *IESO* calculates prices for *energy* for *settlement* purposes in the *day-ahead market*;

transmission tariff means a tariff fixed or authorized by the OEB in a rate order issued pursuant to the *Ontario Energy Board Act, 1998* with respect to the provision of *transmission services*;

Proposed Edits to Definitions Provisionally Approved by the IESO Board in Prior Batches

Note: Proposed edits to definitions highlighted in grey

day-ahead market or DAM means a daily, *IESO-administered market* that creates financially binding obligations for a *dispatch day* on the day prior to the **relevant dispatch day**;

locational marginal price or LMP means, in respect of a **delivery point, intertie metering point, or other relevant location**, the price of *energy or operating reserve* determined in the *real-time market* or in the *day-ahead market* in accordance with the provisions of MR Ch. 7, or an **administrative price**, where applicable. For greater certainty, the *locational marginal price for intertie* transactions includes both the *intertie border price* and the *intertie congestion price*;

resource means an *IESO-modelled representation* of one or more *generation units, electricity storage units*, or sets of *load equipment*, existing within the *IESO's systems*, which is used for the secure operations of the *IESO control area*, or to participate in the *IESO-administered markets*; or a **boundary entity resource**; or **virtual zonal resource**;

Note: the proposed definition for ‘*resource*’ which was provisionally approved in the first batch of MRP definitions is currently included in the interim alignment batch of definitions with edits as shown. The addition of “or *virtual zonal resource*” is an additional edit proposed as part of this definitions package.

**Previously Released with MR-00461-R02 – Calculation Engines: Batch 3
Definitions – used in Settlements Batch**

Note: Proposed edits to definitions highlighted in grey

cascade group means one or more *forebays* in a cascade river system in which all *resources* registered across each *forebay* have the same owner;

day-ahead market calculation engine means an algorithm that consists of three passes, where each pass executes one or more optimization problems solved by the *IESO* to determine schedules and prices in accordance with **MR Ch. 7 App. 7.5** to meet the needs of the *day-ahead market*;

delivery point means a uniquely identified reference point determined in accordance with **MR Ch. 9, s. 2.4A.1** and used for *settlement* purposes in the *day-ahead market* and *real-time market*, other than in respect of transactions involving the transmission of *energy or ancillary services* into or out of the *IESO-controlled grid* from a neighbouring *transmission system*;

forbidden region means an operating range between the applicable lower limit and upper limit within which a hydroelectric *generation resource* cannot maintain steady operation without causing equipment damage. A hydroelectric *generation resource* may have more than one *forbidden region*;

forebay means a body of water within a *cascade group* upon which one or more hydroelectric *generation resources* that have the same *registered market participant* may be registered;

linked forebay means a *forebay* that is upstream or downstream from another *forebay* in the same *cascade group*, and that has a *time lag* relationship and *MWh ratio* with the other *forebay*;

load equipment means equipment within a *load facility* that draws electrical *energy* from the *integrated power system*;

minimum daily energy limit means the minimum amount of *energy* in MWh that must be scheduled within a *dispatch day* for a hydroelectric *generation resource* or collectively from all hydroelectric *generation resources* registered on the same *forebay*;

minimum hourly output means the minimum amount of *energy*, in MWh, that must be scheduled for a hydroelectric *generation resource* within a *dispatch hour* if scheduled above 0 MWh;

MWh ratio means the proportional amount of *energy* that must be scheduled on the *resources* registered on the downstream *linked forebay* after the *time lag* has elapsed for every MWh of *energy* scheduled on the *resources* registered on the upstream *linked forebay*;

non-quick start resource means a *generation resource* or an *electricity storage resource* whose electrical *energy* output cannot be provided to the *IESO-controlled grid* within 5 minutes of the *IESO's* request and is provided by equipment not synchronized to the *IESO-controlled grid* when the request to start providing *energy* is made;

Ontario zonal price means the price of *energy* in Ontario, prior to any adjustments made as a result of the load forecast deviation charge, applicable to *non-dispatchable loads*, as determined in the *real-time market* or in the *day-ahead market* in accordance with the provisions of MR Ch. 7, or an *administrative price*, where applicable;

pre-dispatch schedule means an hourly schedule for the remaining hours of a *dispatch day* and may include all hours of the next *dispatch day* as determined by the *pre-dispatch calculation engine*;

real-time schedule means:

- (i) in respect of a *dispatchable generation resource*, a *dispatchable electricity storage resource*, or a *dispatchable load resource*, a *dispatch* schedule for a *dispatch interval* as determined by the *real-time calculation engine*;
- (ii) in respect of a *boundary entity resource*, an *interchange schedule*;
- (iii) in respect of an *hourly demand response resource*, a schedule to reduce *energy* withdrawals as determined by the relevant *pre-dispatch schedule*; or
- (iv) in respect of a *non-dispatchable generation resource* or *self-scheduling electricity storage resource* that intends to inject *energy*, a schedule as determined by the *real-time calculation engine*;

settlement floor price means the minimum price that a *market participant* may be charged or paid for *energy* and is established by the *IESO Board*;

single cycle mode means the mode of operating a *pseudo-unit* without the steam turbine *generation unit(s)*;

virtual transaction means a transaction in the *IESO-administered markets* in the form described in MR Ch.7, s. 3.4.1.4B, that creates a financial obligation to settle against the difference between the *day-ahead market virtual zonal price* and the *real-time market virtual zonal price*, without a corresponding injection or withdrawal of *energy* in the *real-time market*;

virtual transaction zone means a region internal to the *IESO control area* designated by the *IESO* for the purpose of conducting *virtual transactions*;

virtual zonal price means, in respect of a *virtual transaction zone*, the price of *energy* determined in the in the *day-ahead market* or *real-time market* in accordance with the provisions of MR Ch. 7;

virtual zonal resource means a construct existing within the *IESO's* systems that corresponds to a *virtual transaction zone*, that facilitates *virtual transactions*;

Appendix A

MR-00472-R00 – Replacement of the IESO Settlement System (RSS) – Amendments to Defined Terms: Included for Reference Only

dispute outcome means the outcome of a dispute resolution process that requires adjustments to one or more *settlement statements*, whether arising from good faith negotiations, mediations, or an *arbitrator's* order;

final recalculated settlement statement means the *recalculated settlement statement* issued by the *IESO* in accordance with either section 6.3.5(g) or section 6.3.16(g) of Chapter 9;

final settlement statement means the *IESO's* final statement of the payments to be made by or to a *market participant* with respect to a given *billing period* and, in respect of the *settlement* of the purchase or sale of *transmission rights* in the *TR market*, the *IESO's* final statement of the payments to be made by or to a *TR holder* with respect to a given *TR auction* or the final statement of the payments to be made by or to a *TR holder* with respect to a given *billing period*;

recalculated settlement statement means the *IESO's* recalculated statement of the payments to be made by or to a *market participant* with respect to a given *billing period* and, in respect of the *settlement* of the purchase and sale of *transmission rights* in the *TR market*, the *IESO's* recalculated statement of the payments to be made by or to a *TR holder* with respect to a given *TR auction* or the recalculated statement of the payments to be made by or to a *TR holder* with respect to a given *billing period*;

RSS commencement date means the date on which *market rule amendment MR-00475-R00* comes into effect;

settlement statement means a *preliminary settlement statement*, a *final settlement statement*, and/or a *recalculated settlement statement*;