Market Rule Amendment Proposal Form

Part 1 – Market Rule Information

Identification No.:	MR-00461-R03
Subject:	Market Renewal Program
Title:	MRP Interim Alignment – Defined Terms
Nature of Proposal:	☒ Alteration ☒ Deletion ☒ Addition
Chapter:	Chapter 11
Appendix:	
Sections:	N/A
Sub-sections proposed for amending:	N/A
Current Market Rules Baseline:	September 2022

Part 2 – Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	September 9, 2022
1.1	Updated to include definition for price responsive load and a minor edit to non-dispatchable load.	October 21, 2022
2.0	Draft following stakeholder feedback period	December 20, 2022
3.0	Draft for Technical Panel Review	February 7, 2023
4.0	Publish for stakeholder review and comment	February 22, 2023
5.0	Submitted for Technical Panel Provisional Vote	April 11, 2023
6.0	Provisionally recommended by Technical Panel	April 18, 2023

Approved Amendment Publication Date:

Approved Amendment Effective Date:

Part 3 – Explanation for Proposed Amendment

Summary

The IESO proposes to amend various Chapter 11 definitions in the market rules to support the Market Renewal Program (MRP) Interim Alignment batch market rule packages (MR-00457-R00 to R03).

Background

Please refer to MRP backgrounder in MR-00450-R00.

Discussion

The Interim Alignment Batch is intended to include amendments that will facilitate the implementation of market renewal and reduce the volume of amendments that will be required in future market rule batches. The amendments to the defined terms contained in this proposal will:

- Support the integration of the defined term *resource* into the market rules;
- Introduce electricity storage into the market renewal rules;
- Remove the defined terms related to Congestion Management Settlement Credits (CMSC), which will not be a feature of the renewed market.

This proposal contains amendments to defined terms that are in the current baseline of the market rules or were provisionally approved in one of the previous MRP batches. In some cases, definitions are removed as they no longer be required in the renewed market, and there are four new definitions.

The accompanying Summary of Changes document prepared for the Interim Alignment batch provides an explanation for each of the amendments proposed below.

Part 4 – Proposed Amendment

Definitions

automatic generation control or *AGC* means the process that automatically adjusts the output from a ~~*generation facility*~~ *generation resource* or an ~~*electricity storage facility*~~ *electricity storage resource* that is providing *regulation;*

called capacity export means an *energy* export from the *IESO control area* that is supported by the capacity of a ~~*generation unit*~~*generation resource* or the capacity for

injection of an ~~*electricity storage unit*~~*electricity storage resource* within the *IESO control area* that has committed its capacity, or a portion thereof, to an external *control area* and that capacity has been called by the external *control area operator* in accordance with section 20.3 of Chapter 7;

capacity auction eligible generation resource means a *generation resource* that is a *non-committed resource* ~~that is associated with a *generation facility*, which is also~~ associated with a *connected facility* at the commencement of the capacity enrollment process for a given *capacity auction*, and which is registered as ~~dispatchable~~ *dispatchable* with the *IESO* prior to the *obligation period* in accordance with the timelines specified in the applicable *market manual*;

capacity auction eligible storage resource means an *electricity storage resource* that is a *non-committed resource* associated with a ~~n *electricity storage facility*, which is also a~~ *connected facility* at the commencement of the capacity enrollment process for a given *capacity auction*, and which is registered as dispatchable with the *IESO* prior to the *obligation period* in accordance with the timelines specified in the applicable *market manual*;

capacity auction resource means a ~~resource type~~*resource* specified in section 19.1.2 of Chapter 7 and is utilized by a *capacity auction participant* to satisfy a *capacity obligation*;

capacity dispatchable load resource means ~~the *capacity auction resource* associated with~~ a *dispatchable load* that has received a *capacity obligation* in a given *capacity auction* in accordance with the applicable *market manual*;

capacity export request means a request submitted to the *IESO* by a *market participant* for approval to commit the Ontario-based capacity of a ~~*generation unit*~~*generation resource* or the injection capacity of an ~~*electricity storage unit*~~*electricity storage resource* to an external *control area* in accordance with section 20.1 of Chapter 7*;*

~~*Certified* *certified* *black start facility*~~ means a ~~*registered* *generation* *facility*~~ contracted in accordance with section 4.2.2 of Chapter 9, that, to the satisfaction of the *IESO* acting reasonably, has complied with and continues to comply with equipment and staffing configurations, training and maintenance programs and inspection and testing regime as set out in the *market rules* or the *Ontario power system restoration plan*, and from which the *IESO* may direct the delivery of power without assistance from the electrical system.

combined cycle plant means a group of *generation resources* associated with a *generation facility* in which *energy* is generated by one or more *generation units* that are combustion turbines and by one *generation unit* that is a steam turbine for which steam is supplied by recovery of waste heat from one or more of the combustion turbines or by an independent injection of heat from duct firing;

~~*constrained off dispatchable load* means a *dispatchable load, electricity storage unit* or *boundary entity dispatched* by the *IESO* to consume (or to withdraw in the case of an *electricity storage unit* or *boundary entity*) less *energy* in order to assist in addressing~~

~~a transmission flow constraint on the *IESO-controlled grid* or a *security limit* in circumstances where such *dispatchable load, electricity storage unit* or *boundary entity* would, but for such constraint or *security limit*, otherwise be or have been *dispatched* to consume (or to withdraw in the case of an *electricity storage unit* or *boundary entity*) more *energy*;~~

~~*constrained off event* means, in respect of a *generation unit,* an *electricity storage unit,* a *dispatchable load*, or a *boundary entity*, the event of being *dispatched* as a *constrained off facility*;~~

~~*constrained off facility* means a *constrained off generation unit,* a *constrained off dispatchable load* or both;~~

~~*constrained off generation unit* means a *generation unit, electricity storage unit,* or *boundary entity dispatched* by the *IESO* to supply (or to inject in the case of an *electricity storage unit* or *boundary entity*) less *energy* in order to assist in addressing a transmission flow constraint on the *IESO-controlled grid* or a *security limit* in circumstances where such *generation unit, electricity storage unit,* or *boundary entity* would, but for such constraint or *security limit,* otherwise be or have been *dispatched* to supply (or to inject in the case of an *electricity storage unit* or *boundary entity*) more *energy*;~~

~~*constrained on dispatchable load* means a *dispatchable load, electricity storage unit* or *boundary entity dispatched* by the *IESO* to consume (or to withdraw in the case of an *electricity storage unit* or *boundary entity*) more *energy* in order to assist in addressing a transmission flow constraint on the *IESO-controlled grid* or a *security limit* in circumstances where such *dispatchable load, electricity storage unit* or *boundary entity* would, but for such constraint or *security limit*, otherwise be or have been *dispatched* to consume (or to withdraw in the case of an *electricity storage unit* or *boundary entity*) less *energy*;~~

~~*constrained on event* means, in respect of a *generation unit,* an *electricity storage unit,* a *dispatchable load* or a *boundary entity*, the event of being *dispatched* as a *constrained on facility* ;~~

~~*constrained on facility* means a *constrained on generation unit,* a *constrained on dispatchable load* or both;~~

~~*constrained on generation unit* means a *generation unit, electricity storage unit,* or *boundary entity dispatched* by the *IESO* to supply (or to inject in the case of an *electricity storage unit* or a *boundary entity*) more *energy* in order to assist in addressing a transmission flow constraint on the *IESO-controlled grid* or a *security limit* in circumstances where such *generation unit, electricity storage unit,* or *boundary entity* would, but for such constraint or *security limit*, otherwise be or have been *dispatched* to supply (or to inject in the case of an *electricity storage unit, boundary entity*) less *energy*;~~

control centre means, in respect of a ~~*registered* *facility*~~ or group of *facilities,* an *attended location* where signals and instructions for controlling the ~~*facilities*~~ associated

resources are received from an *authority centre* or the *IESO*, and transferred directly to the *facilities* for implementation;

curtailment means the involuntary curtailment of consumption by *non-dispatchable loads* or *price responsive loads* as a result of insufficient *generation capacity* or *electricity storage capacity*, of a limitation in the capacity of a *transmission system* or of actions taken by the *IESO* pursuant to Chapter 5 to maintain the *reliability* of the *IESO-controlled grid* or of the *electricity system*;

demand response contributor means ~~a~~ *load* ~~*facility*~~ *equipment* that is associated with an *hourly demand response resource* and is used to satisfy in whole or a portion of a *capacity obligation. Demand response contributors* are registered by *capacity market participants* as part of the contributor management process detailed in the applicable *market manual*;

~~A *designated constrained off watch zone* means an area within Ontario as set out in the applicable *market manual*, including connected *intertie zones*, that is monitored to determine if persistent and significant congestion management *settlement* credit payments for *constrained off events* are being made. These watch zones may be further designated for injections, withdrawals or both;~~

electricity storage station service means *station service* associated with an *electricity storage facility* that is ~~-~~compriseding of one or more *electricity storage units* each of which is associated with a *resource*, including a *resource* ~~a *registered facility* or which together have been~~that is aggregated ~~as a *registered facility*~~ in accordance with section 2.3 of Chapter 7;

electricity storage resource means a *resource* modelled to represent one or more *electricity storage units*;

electricity system means the *integrated power system* and all ~~*registered*~~ *facilities* registered with the *IESO* in accordance with section 2 of Chapter 7 that are connected to that system;

embedded load facility means a *load facility* ~~*dispatchable load* or a *non-dispatchable load*~~ within the *IESO control area* that is not directly *connected* to the *IESO-controlled grid* but is instead embedded within a *distribution system*;

enhanced combined cycle facility means a *generation facility* with one or more *combined cycle plants* ~~combined cycle facility~~ in which the steam utilized to generate electricity in one or more of the steam turbines is supplemented by recovery of waste heat from an independent industrial process/processes such as waste heat from the gas turbine exhaust of a natural gas compressor station, and qualifies for treatment as a Class 43.1 facility or has qualified as a Class 34 facility under the Income Tax Act, R.S.C. 1985, c.1. ~~Combined cycle facilities are *generation facilities* in which electricity is generated by one or more combustion turbines or engines, and by one or more steam turbines for which steam is supplied by recovery of waste heat from one or more of the combustion turbines or engines~~;

exemption means an exclusion from one or more specific obligations or standards which are or may be imposed on the *exemption applicant* or in respect of the *exemption applicant's facilities*, ~~or~~ equipment or *resources* pursuant to the *market rules*, *market manuals* or from any standard, policy or procedure established by the *IESO* pursuant to the *market rules*;

flexible nuclear generation means the component of a nuclear *generation* ~~*facility*~~ *resource* that has flexibility for reductions due to the operation of condenser steam discharge valves, and is made available at the sole discretion of the *flexible nuclear generator* to manoeuvre without requiring ~~a unit~~ the *resource* to shutdown under normal operations, while respecting safety, technical, equipment, environmental and regulatory restrictions;

flexible nuclear generator means a *generator* whose *generation* ~~*facility*~~ *resource* has a component classified as *flexible nuclear generation*;

generation station service means *station service* associated with a *generating facility* that is ~~comprising~~ comprised of one or more *generation units* each of which is associated with a *resource,* ~~a *registered facility*~~ including a *resource* that is aggregated ~~or which together have been aggregated as a *registered facility*~~ in accordance with section 2.3 of Chapter 7;

~~*historical reference price* means (i) in respect of an *investigated facility* which is not a hydroelectric *generation facility*, the unweighted average of the price contained in all *energy offers* or *energy bids* submitted by the *registered market participant* for that *investigated facility* and accepted by the *IESO*, as reflected in the most recent *market schedules* for that *investigated facility* for the *dispatch intervals* to which such *energy offers* or *energy bids* relate, during all relevant hours in the ninety days preceding the date for which an *investigated price* is submitted by the *registered market participant* for that *investigated facility* and (ii) in respect of an *investigated facility* which is a hydroelectric *generation facility*, the average *market price* weighted by the *market schedule* quantity during all relevant intervals in the thirty days preceding the date on which an *investigated price* was submitted by the *registered market participant* for that *investigated facility*;~~

hourly demand response resource means the *capacity auction resource* type ~~that is a registered facility~~ that has received a *capacity obligation* in a given *capacity auction* and is used by a *capacity market participant* to satisfy a *capacity obligation* on an hourly basis and is activated by the *IESO* in accordance with section 19.4 of Chapter 7*;*

intermittent ~~*generator*~~ *generation resource* means a *generation* ~~*facility*~~ *resource* ~~located within the *IESO control area*~~ that generates on an intermittent basis as a result of factors beyond the control of the *generator* unless limited by *dispatch,* and excludes a *variable* ~~*generator*~~*generation resource*;

~~*investigated facility* means, in respect of an *investigated price,* the *constrained on facility* or the *constrained off facility* whose *registered market participant* submitted the *energy offer* or *energy bid* that contains that *investigated price*;~~

~~*investigated price* means a price contained in an *energy offer* or an *energy bid* submitted by the *registered market participant* for a *constrained on facility* or a *constrained off facility* that is the subject of investigation or of an inquiry pursuant to Appendix 7.6 of Chapter 7 in respect of a given *constrained on event* or a given *constrained off event*;~~

load *equipment* means equipment within a *load facility* ~~one or more pieces of equipment~~ that ~~consume~~ draws electrical *energy* from the *integrated power system*;

load resource means a *resource* modelled to represent one or more sets of *load~~s~~* *equipment*;

major dispatchable load facility means a ~~*dispatchable*~~ *load facility* ~~that includes~~ associated with a *dispatchable load* that is rated at 100 MVA or higher; that comprises ~~*dispatchable*~~ sets of *load~~s~~* *equipment* that are associated with *dispatchable loads*, the ratings of which in the aggregate equals or exceeds 100 MVA; or that is re-classified as a *major dispatchable load facility* pursuant to section 1.5.1 of Appendix 2.2 of Chapter 2 or section 7.8.1 of Chapter 4;

major generation facility means a *generation facility* that includes a *generation unit* associated with a *resource* that provides *regulation*; that includes a *generation unit* that is rated at 100 MVA or higher; that comprises *generation units* the ratings of which in the aggregate equals or exceeds 100 MVA; or that is re-classified as a *major generation facility* pursuant to section 1.5.1 of Appendix 2.2 of Chapter 2 or section 7.8.1 of Chapter 4;

minor dispatchable load facility means a ~~*dispatchable*~~ *load facility* ~~that includes~~associated with a *dispatchable load* that is rated at 1 MVA or higher but less than 20 MVA; that comprises ~~*dispatchable*~~ *sets of* ~~*loads*~~ *load equipment* that are associated with *dispatchable loads*, the ratings of which in the aggregate equals or exceeds 1 MVA but is less than 20 MVA; or that is re-classified as a *minor dispatchable load facility* pursuant to section 1.5.2 of Appendix 2.2 of Chapter 2 or section 7.8.2 of Chapter 4;

non-committed resource means ~~a *registered facility*~~the *resource* for a *facility* that is neither - in whole or in part - rate-regulated, contracted to the *IESO*, contracted to the *OEFC*, or obligated as a resource backed capacity export to another jurisdiction during the entire duration of a given *obligation period*;

non-dispatchable load means a ~~load~~ *resource* *load resource*, within the *IESO control area*, that is not *dispatchable* ~~subject to *dispatch* by the *IESO*~~ and whose level is not selected or set by the *IESO* based on the price of *energy* in the *real-time market*;

operating deviation means the deviation described in section 3.8 of Chapter 9 between the performance of a ~~*registered facility*~~*resource* and the performance required of that ~~*registered facility*~~*resource* for the provision of *operating reserve*;

operating result means the physical quantity or quantities measured or estimated by the *IESO* as delivered by a ~~*registered facility*~~*resource* during the actual operation of the *electricity system*;

~~*pre-dispatch day* means the day prior to a *dispatch day*;~~

price responsive load means a *load resource* for which the *registered market participant* is authorized to submit *bids* for *energy* into the *day-ahead market* but for which the *load resource* is ~~a *non-*~~not *dispatchable* ~~-~~and whose level is not selected or set by the *IESO* based on the price of *energy* in the *real-time market;* ~~*load* in the *real-time market*~~;

pseudo-unit means a *dispatchable generation resource* associated with a ~~combined cycle *generation facility*~~*combined cycle plant* that is modeled based on a gas-to-steam relationship between generation units, and which is comprised of one *resource* for the combustion turbine generation unit and a share of one steam turbine generation unit at the same ~~combined cycle *generation facility*~~*combined cycle plant*;

~~*reference price* means one or more of (i) a *historical reference price;* (ii) a price equal to the *market price* for *energy* determined for the *dispatch interval* in respect of which an *investigated price* was submitted; and (iii) such other *reference price* as may be established by the *IESO Board* pursuant to section 1.3.4 of Appendix 7.6 of Chapter 7;~~

reliability must-run contract means a contract between the *IESO* and a *registered market participant* or prospective *registered market participant* for a *resource* that is or will be a *generation resource*, an ~~*electricity storage facility*~~ *electricity storage resource*, a *dispatchable load resource* or a *boundary entity resource*, which allows the *IESO* to call on that *registered market participant's* or prospective *registered market participant's resource* in order to maintain reliability of the *IESO-controlled grid*;

reliability must-run resources means the ~~resources~~ *resources* described in section 4.8.1 of Chapter 5; these may also be referred to as *must-run resources*;

remaining duration of service means the remaining time it is expected that an ~~*electricity storage facility*~~ *electricity storage resource* can continue injecting, or withdrawing, until it reaches its *lower energy limit,* or *upper energy limit*, respectively, assuming the *electricity storage* ~~*facility*~~ *resource* continues operating at its quantity offered or bid;

Request for ~~*s*~~*Segregation* means a request from a *registered market participant* for approval to operate its ~~*registered facility*~~*resource* in a *segregated mode of operation*;

resource means an *IESO*-modelled representation of one or more *generation units*, *electricity storage units,* or sets of *load*~~*s*~~ *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-administrated markets*; or a *boundary entity resource*;

segregated mode of operation means an electrical configuration where a portion of the *IESO-controlled grid* is used to *connect* one or more ~~*registered facilities* that are~~

generation ~~facilities~~ resources to a neighbouring *control area* using a *radial intertie* for the purposes of delivering electricity or *physical services* to such *control area*;

self-schedule means an hourly schedule specified by a *self-scheduling generation ~~facility~~ resource* or a *self-scheduling electricity storage ~~facility~~resource,* and *self-scheduling* has an analogous meaning;

self-scheduling electricity storage resource means an *electricity storage resource* that is not *dispatchable* except for the provision of *regulation* services in respect of which it shall follow *dispatch instructions,* and when it intends to withdraw energy is authorized to submit bids for *energy* into the *day ahead market;*

self-scheduling electricity storage facility means an *electricity storage facility* comprised of one or more *electricity storage units* that are each exclusively associated with a *self-scheduling electricity storage resource*;~~located within the *IESO control area* that can operate independently of *dispatch instructions* from the *IESO,* except for the provision of *regulation* services in respect of which it shall follow *dispatch instructions*~~;

self-scheduling electricity storage facility means an *electricity storage facility* comprised of one or more *electricity storage units* that are each exclusively associated with a *self-scheduling electricity storage resource*;

self-scheduling generation facility means a *generation facility* comprised of one or more *generation units* that are each exclusively associated with a *self-scheduling generation resource* ~~located within the *IESO control area* that can operate independently of *dispatch instructions* from the *IESO*~~;

self-scheduling generation resource means a *generation resource* that can operate independently of *dispatch instructions* from the *IESO*;

significant dispatchable load facility means a ~~*dispatchable* *load facility*~~ that ~~includes a~~is associated with a *dispatchable load* that is rated at 20 MVA or higher but less than 100 MVA; that comprises ~~*dispatchable*~~ sets of *load~~s~~ equipment* that are associated with *dispatchable loads,* the ratings of which in the aggregate equals or exceeds 20 MVA but is less than 100 MVA; or that is re-classified as a *significant dispatchable load facility* pursuant to section 1.5.1 or 1.5.2 of Appendix 2.2 of Chapter 2 or section 7.8.1 or 7.8.2 of Chapter 4;

system-backed capacity auction eligible import resource means a *capacity auction resource* associated with a *boundary entity resource* that is available to enroll capacity that a neighbouring *control area operator* is willing to allocate to Ontario, if a *capacity obligation* is secured, for the duration of the applicable *obligation period*, which capacity would be deemed to be supplied from the entire system of the neighbouring *control area.* The allocated capacity must not otherwise be - in whole or in part - contracted to or otherwise obligated to be provided to the *IESO*, the *OEFC*, or another *control area operator* during the entire duration of a given *obligation period*;

~~*transitional scheduling generator* means a *generation facility* located within the *IESO control* area that is under contract with *OEFC* effective April 1, 1999 and surviving the~~

~~*market commencement date,* and is registered as such in accordance with the applicable sections of Chapter 7;~~