



Market Rule Amendment Submission

This form is used to request an amendment to, or clarification of, the *Market Rules*. Please complete the first four parts of this form and submit the completed form by email to the following:

Email Address: Rule.Amendments@ieso.ca

Attention: Market Rules Group

Subject: Market Rule Amendment Submission

All information submitted in this process will be used by the *IESO* solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the *confidentiality classification* of “Public” upon receipt. You should be aware that the *IESO* will *publish this amendment submission* if the *Technical Panel* determines it warrants consideration and may invite public comment.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *Market Rules*.

PART 1 – SUBMITTER’S INFORMATION

Please enter contact information in full.

Name: IESO Staff

(if applicable) *Market Participant /
Metering Service Provider No.*¹: N/A

Market Participant Class:
N/A

Telephone: 905-855-6445

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E-mail Address: rule.amendments@ieso.ca

PART 2 – MARKET RULE AMENDMENT SUBMISSION INFORMATION

Subject: Ancillary Services

Title: Mandatory Requirements for Regulation Service Providers

Nature of Request (please indicate with x)

Alteration

Deletion

Addition

Clarification

Chapter: _____ Appendix: 5.1 Sections 1.1

Sub-sections proposed for amending/clarifying: _____

¹ This number is a maximum of 12 characters and does not include any spaces or underscore.

PART 3 – DESCRIPTION OF THE ISSUE

Provide a brief description of the issue and reason for the proposed amendment. If possible, provide a qualitative and quantitative assessment of the impacts of the issue on you and the *IESO-administered markets*. Include the Chapter and Section number of the relevant *market rules*.

Summary

The IESO proposes amendments to the market rules to increase the transparency and consistency of performance requirements for all registered facilities providing regulation service. The proposed amendments will clarify that certain performance requirements – off-nominal frequency, speed frequency regulation, and voltage ride through – apply to all regulation service providers, regardless of size or connection location.

Background

Regulation service, like other ancillary services the IESO procures (reactive support and voltage control, operating reserve and black start capability), is necessary to maintain the reliability of the IESO-controlled grid (ICG). Regulation service is used to control power system frequency and maintain the balance between load and generation on a second-by-second basis. The IESO must maintain sufficient regulation to meet North American Electric Reliability Corporation (NERC) reliability standards. To fulfill this mandate, all resources providing regulation service must meet a minimum set of performance requirements that ensures their availability over a range of expected ICG conditions.

Traditionally, regulation service has been supplied by synchronous generators directly connected to the ICG, which, in addition to the performance requirements specific to regulation service in section 1.1 of [Appendix 5.1](#) (Performance Standards for Ancillary Services), are also subject to a strict set of requirements outlined in [Appendix 4.2](#) (Generation Facility Requirements) to ensure their support is available when needed.

Today, alternative technologies (such as batteries, flywheels and load) now have the potential to be suppliers of regulation service. In some cases, the size, composition or location of an alternative technology regulation service provider makes it more suitable for a distribution system connection, rather than a direct connection to the ICG. The market rules did not contemplate that these distribution connected alternative technologies would provide regulation service. However, regardless of size or connection location, the technical requirements of the service provided by regulation providers must satisfy the same minimum standards. This proposed market rule amendment will clarify that all regulation service providers are subject to certain performance requirements of Appendix 4.2. Specifically, all regulation service providers will be expected to meet categories: 1 (off-nominal frequency), 2 (speed/frequency regulation), and 3 (voltage ride through) of Appendix 4.2.

Ancillary service providers are required to undergo the Connection Assessments and Approval (CAA) process by submitting a [System Impact Assessment \(SIA\)](#) application for ancillary services, pursuant to section 6.1 of [Chapter 4](#) of the market rules and as presented in [Market Manual 2: Administration, Part 2.10: Connection Assessment and Approval](#), to obtain the IESO's Notification of Conditional Approval for connection. The objective of the CAA/SIA process is to ensure the reliability of the ICG. Pursuant to section 6.1.7 of Chapter 4, the IESO will identify whether the new or modified connection of a facility will have an adverse effect on the reliability of the ICG, and specify any upgrades required prior to connection. Rather than waiting until the end of the process to identify issues, this market rule

PART 3 – DESCRIPTION OF THE ISSUE

amendment will provide transparency and codify the basic requirements that any regulation provider is required to meet, independent of its size, composition or location. As part of the CAA process, regulation service providers will be required to demonstrate their proposed technology's ("as-planned") compliance with the applicable requirements, including the applicable requirements in categories 1, 2 and 3 of Appendix 4.2. Additional connection requirement details for these categories can be found in [Market Manual 2: Market Administration Part 2.20: Performance Validation](#).

PART 4 – PROPOSAL (BY SUBMITTER)

Provide your proposed amendment. If possible, provide suggested wording of proposed amendment.

Amend the market rules to increase the transparency and consistency of performance requirements for all registered facilities providing regulation service by clarifying that certain performance requirements – off-nominal frequency, speed frequency regulation and voltage ride through – apply to all regulation service providers regardless of size or connection location.

PART 5 – FOR IESO USE ONLY

Technical Panel Decision on Rule Amendment Submission: Warrants consideration

MR Number: MR-00432

Date Submitted to *Technical Panel*: June 20, 2017

Accepted by *Technical Panel* as: (please indicate with x)

Date:

General Urgent Minor

June 27, 2017

Criteria for Acceptance: The identified changes increase transparency and consistency within the market rules.

Priority: Regular

Criteria for Assigning Priority: The intent to pursue changes was mentioned at the 2017 Request for Proposals for Incremental Regulation Capacity webinar on June 8, 2017 followed by an article in the June 8, 2017 IESO Bulletin.

Not Accepted (please indicate with x):

Clarification/Interpretation Required (please indicate with x):

Technical Panel Minutes Reference: IESOTP June 2017

Technical Panel Comments: _____