

Appendix A

Proposed TCM Updates – Amendments and Rationales

The AESO values Stakeholder feedback as a critical part of the processes undertaken to inform and reach decisions, and would like to thank all those who shared their perspectives during the Stage 1 consultation process for the proposed TCM Updates.

The AESO has reviewed the responses provided by Stakeholders and determined that the responses generally centered around a need for further clarity on the intent of the proposed TCM Updates, particularly with respect to the proposed amendments to the definition of “acceptable operational reason” and those relating to the defined term “transmission market constraint”. This document is intended to provide clarity on these matters.

General overview

By way of further clarification, the AESO advises that the proposed TCM Updates are intended to:

1. Clarify that Section 302.1 of the ISO rules, *Real Time Transmission Constraint Management* (“TCM Rule”) is used by the AESO specifically to mitigate certain conditions involving an exceedance of a reliability limit on 1 or more transmission system element. The AESO does not, without more, utilize the procedure set out in the TCM Rule (“TCM Protocol”) for a source asset that becomes electrically disconnected from the interconnected electric system. This reflects the AESO’s current and historical practices pertaining to the application of the TCM Rule and does not represent a change to these practices.
2. Provide a source asset that would otherwise be connected to the transmission system the ability to use an acceptable operational reason to reflect its inability to provide energy to the interconnected electric system when the source asset is electrically disconnected.
3. Provide a source asset connected to an electric distribution system the ability to use an acceptable operational reason to reflect its inability to provide energy to the interconnected electric system due to a distribution outage or constraint.

TCM Rule and related terminology

The term “transmission constraint”, is currently defined in the AESO’s *Consolidated Authoritative Document Glossary* (“CADG”) as follows:

means a limitation imposed by one (1) or more transmission elements to normal economic merit operation of generation, load and interchange transactions or to the flow of electrical energy from one part of the interconnected electric system to the other.

“Transmission constraint”, for purposes of the TCM Rule, reflects a narrow, markets-focused concept that contemplates a type of constraint on the transmission system that results in

“congestion”, and which requires a limitation to the normal economic merit supply of energy to the interconnected electric system to resolve the underlying constraint.

However, the AESO recognizes that the term “transmission constraint”, in the general sense, may have a broader meaning than is ascribed to it in the CADG for purposes of the TCM Rule. In this broader sense, “transmission constraint” may refer to a situation on the transmission system involving the violation of a transmission reliability requirement—such as the requirements found in the reliability standards, transmission reliability criteria, or system operating limits—but which may not necessarily result in congestion. Effectively, this transmission constraint (in the broader sense) requires a limit to the flow of power to protect equipment and system reliability, which mitigation may or may not require a limitation to the normal economic merit supply of energy to the interconnected electric system through the use of the TCM Protocol.

Under the current TCM Rule, the AESO uses the TCM Protocol to mitigate a transmission constraint in the narrow sense of the term (as contemplated in the current CADG definition). The TCM Protocol does not apply to a transmission outage that results in the electrical disconnection of a source asset that would otherwise be connected to the transmission system, given that the electrical disconnection does not in and of itself represent an exceedance of a transmission system element’s reliability limit. The AESO notes, however, that the electrical disconnection may subsequently have the *consequential impact* of violating a transmission reliability requirement that requires mitigation by the AESO, depending on the prevailing system conditions. In such cases, and depending on the circumstances, it is possible that the AESO may then apply the TCM Protocol.

As part of the proposed TCM Updates, the AESO proposes a new definition, “transmission market constraint”, to help clarify that the TCM Protocol is applied specifically to scenarios that require a limitation to the normal economic merit supply of energy to the interconnected electric system to resolve a “transmission constraint” in the broader sense (*i.e.*, violation of a transmission reliability requirement).

Proposed amendments to “acceptable operational reason”

The AESO has identified a lack of clarity regarding the AESO’s expectations when a source asset’s available capability is impacted by a) a distribution outage or constraint, or b) a transmission outage that results in an electrical disconnection from the interconnected electric system. Currently, an acceptable operational reason is unavailable to a market participant if a source asset is electrically disconnected from the transmission or distribution system, or if a distribution-connected generator is otherwise unable to provide electric energy to the interconnected electric system due to a constraint on the distribution system, with no ability for the market participant to accurately reflect its available capability to the AESO and the market.

The AESO’s proposed additions to the definition of “acceptable operational reason” and the proposed new defined term “transmission market constraint” provide enhanced clarity about the AESO’s expectations for: managing transmission market constraints; distribution outages and constraints impacting a distribution-connected source asset’s ability to deliver energy to the

interconnected electric system; and transmission outages where a transmission-connected generator becomes electrically disconnected from the transmission system.

These proposed amendments promote transparency of information to the market regarding a generating unit's available capability, which aligns with the principles of the fair, efficient, and openly competitive operation of the market. The proposed amendments also provide the AESO with visibility of a source asset's available capability, which is necessary to ensure the continued reliable operation of the interconnected electric system.

The AESO does not have visibility of outages or constraints on the distribution system. The proposed amended definition of "acceptable operational reason" is intended to allow the market participant to restate a source asset's available capability when the source asset is unable to deliver energy to the interconnected electric system due to a distribution outage or constraint. To more accurately reflect this intention, the AESO has identified that additional amendments to the proposed amended definition of "acceptable operational reason" may be required, namely the inclusion of "distribution outages" in addition to "distribution constraints". As a result, the AESO is proposing to update the proposed amended definition of "acceptable operational reason" to specify both "distribution outages and constraints", instead of only "distribution constraints".

Accordingly, the proposed TCM Updates now expand the definition of "acceptable operational reason" to include the following:

(vii) re-positioning a source asset within the energy market in response to:

a) a distribution outage or constraint that causes a limitation to the normal economic merit operation of the source asset, or to the flow of electrical energy from the source asset from one part of the electric distribution system or an electric system within the service area of the City of Medicine Hat to any other part of either of those systems; or

b) a transmission outage that results in the source asset being electrically disconnected from the transmission system or an electric system within the service area of the City of Medicine Hat.

Additional Stakeholder feedback

In addition to requesting clarity about the AESO's intentions regarding the proposed changes pertaining to the TCM Rule, Stakeholders raised concerns as those proposed changes relate to the other ISO rules included in the proposed TCM Updates. These are summarized and addressed below:

- Stakeholders requested clarity on the communication protocols between the legal owners of transmission facilities, legal owners of distribution facilities, and market participants. In the AESO's view, in the event of an electrical disconnection, a market participant is expected, through normal course of business, to reflect in the Energy Trading System any information it may receive from the legal owner of the relevant facility regarding any disconnection or reconnection to the interconnected electric system.

- Stakeholders questioned the proposed removal of subsections 3(2)(c) and 9(2)(c) from Section 202.7 of the ISO rules, *Markets Suspension or Limited Markets Operations*. In the AESO's view, the information currently being provided under the referenced sections may not be accurate as the AESO may not have a reasonable estimate of the resumption of ordinary market operations. However, in light of Stakeholder feedback, the AESO proposes to amend the relevant provisions to reflect that the AESO will provide an update, when available, on the resumption of ordinary market operations.
- One Stakeholder noted that there should be alignment in terms of the inclusion or otherwise of the term “automatic forced outage” in Section 306.5 of the ISO rules, *Generation Outage Reporting and Coordination*, and Section 202.6 of the ISO rules, *Adequacy of Supply* (“Section 202.6”). The AESO notes that it has, subsequent to the publication of the Stage 1 Letter of Notice for the TCM Updates on February 6, 2020, identified potential additional amendments to Section 202.6, and has initiated a separate ISO rules development process for Section 202.6.¹ Consequently, the AESO is removing Section 202.6 from the scope of the proposed TCM Updates.
- One Stakeholder suggested that the proposed changes would reduce the granularity/transparency of generation and transmission outage reporting. In the AESO's view, the proposed changes will enhance generator outage reporting by requiring assets to more accurately reflect their ability to deliver energy to the interconnected electric system.

¹ See *Letter of Notice for Development of Proposed Amendments to Section 202.6 of the ISO rules, Adequacy of Supply* (January 5, 2021)