Information documents are not authoritative. Information documents are for information purposes only and are intended to provide guidance. In the event of any discrepancy between an information document and any authoritative document<sup>1</sup> in effect, the authoritative document governs.

# 1 Purpose

This Information Document relates to the following Authoritative Documents:

• Section 202.7 of the ISO rules, *Limited Markets Operations or Markets Suspension* ("Section 202.7").

This Information Document provides additional information regarding the requirements of Section 202.7 of the ISO rules, and its practical operation and implementation.

# 2 State of Limited Markets Operations

The AESO uses several key information technology applications to perform various functions in operating the wholesale electricity markets. These include:

- 1. the Energy Trading System, which facilitates the submissions of energy offers and bids:
- 2. the Energy Management System, which monitors system conditions and parameters;
- 3. the Dispatch Tool, which performs inter-market dispatch calculations for the energy market, the dispatch down service market and the ancillary services market;
- 4. the Automated Dispatch and Messaging System, which facilitates issuing dispatches;
- 5. the OATI Webtrans or the Western Electricity Coordinating Council Interchange Tool which facilitates interchange scheduling; and
- 6. the AESO's interchange tool used to calculate and post interchange capabilities.

In addition, there are multiple electronic communication paths among these systems.

If one or more of these systems or the communication paths are unavailable, the AESO's operation of the markets may be affected which could result in limited markets operations. Examples of situations which could result in limited markets operations include:

- (a) Where the Energy Trading System or the Dispatch Tool, or the communication path between these systems is out of service, such that the AESO may not have access to the current energy market merit order. As the AESO continues to issue dispatches to manage the interconnected electric system supply and demand balance, it may need to invoke limited markets operations.
- (b) When the AESO is forced to evacuate the primary system coordination center and, while in transit to the backup coordination centre, cannot access one or more of the market operation systems. To continue to manage interconnected electric system supply and demand balance, the AESO may issue dispatches based on the last printed copy of the energy market merit order or the last saved energy market merit order on the AESO laptop computer.
- (c) In situations when there is a planned or unplanned Dispatch Tool outage or unavailability, the AESO initiates limited markets operations only if an energy market dispatch needs to be issued. If the outage is of very short duration and system changes do not require an energy market dispatch to be issued, limited markets operations is not initiated by the AESO.

<sup>&</sup>lt;sup>1</sup> "Authoritative document" is the general name given by the AESO to categories of documents made by the AESO under the authority of the *Electric Utilities Act* and associated regulations, and that contain binding legal requirements for either market participants or the AESO, or both. Authoritative documents include the ISO rules, the reliability standards, and the ISO tariff.

- (d) In situations when there is a planned or unplanned Energy Trading System outage, the market participant phones the AESO for any restatement. In accordance with subection 3(3)(i) of ISO rule 201.4 Submission Methods and Coordination of Submissions, this information is not used to determine the energy market merit order. This information informs the AESO of the operational information that affects the pool participant's ability to comply with dispatches or directives. If the Energy Trading System outage is of short duration, it is typically not necessary to initiate limited markets operations. If the Energy Trading System outage is prolonged, then the AESO makes an assessment on the impact to market operations and decides whether or not limited markets operations needs to be initiated.
- (e) In situations where OATI Webtrans, the Western Electricity Coordinating Council Interchange Tool or the AESO interchange tool are unavailable and the AESO is unable to accurately calculate and post an available transfer capability allocation due to more bids and offers than capacity on the Britiish Columbia/Montanna interface then the AESO would initiate limited market operations.

# 3 Declaration of State of Limited Markets Operations

The declaration invoking a state of limited markets operations contains the information specified in subsection 3(2) of Section 202.7 of the ISO rules. If the commencement time of the state of limited market operations is unknown, the AESO provides its best estimate and verifies it later. If the AESO System Controller has determined the version of the energy market merit order, ancillary service merit order or dispatch down service merit order that is being used for issuing dispatches, such details may also be provided in the declaration.

#### 4 Dispatches during State of Limited Markets Operations

#### 4.1 Energy Market

During limited markets operations, the AESO may issue dispatches from a snapshot of the energy market merit order which is the latest available deemed to be appropriate. The snapshot may be a hard copy of the energy market merit order printed prior to the initiation of the limited markets operations or an electronic copy of the energy market merit order downloaded on an AESO portable computer.

#### 4.2 Ancillary Services Market – Operating Reserves

Any dispatched providers of operating reserves at the beginning of limited markets operations remain dispatched to provide those operating reserves while limited market operations remains in effect. If additional operating reserves are required, the AESO uses the best available ancillary services merit order for issuing those dispatches. However, if the required volume of operating reserves decreases, the AESO does not reduce dispatches for operating reserves so that changes to dispatches for the energy market can be minimized.

If limited markets operations move from an on-peak period to an off-peak period, or vice versa, the AESO does not switch to the off-peak ancillary services merit order from the on-peak ancillary services merit order, or vice versa. It is anticipated that the duration of limited markets operations is not generally prolonged, and the AESO uses best efforts to minimize the risk of limited markets operations crossing over the on-peak and off-peak periods, for example by taking this into consideration when planning Dispatch Tool outages.

#### 4.3 Dispatch Down Service Market

In order to minimize the need to issue dispatches for dispatch down service, the AESO maintains the dispatch down service dispatch level at the start of limited markets operations. If the dispatch down service requirement volume changes (e.g. due to changes to the transmission must run levels, the AESO does not adjust (i.e. does not increase or decrease) the dispatch down service dispatches. If the hour moves to the next operating hour, the AESO does not switch to that next hour dispatch down service

#### merit order.

However, the AESO changes the dispatches for dispatch down service if the AESO has issued dispatches up to the reference price. In that case, the AESO partially dispatches off dispatch down service until it is completely dispatched off. If the AESO subsequently dispatches back down to the reference price, the AESO does not increase dispatch down service dispatches in order to minimize the impact to the energy market dispatches.

# 5 Payment to Suppliers on the Margin and Adjustments to Load on the Margin During Limited Market Operations

The uplift payment referred to in subsection 6(c) of the Section 202.7 of the ISO rules is the payment to suppliers on the margin. Since the calculation for the uplift payments to suppliers on the margin depends on data exchange between the Energy Trading System and the Dispatch Tool, when either one of these systems is unavailable, the calculation may be incorrect. Therefore it may be necessary to suspend the uplift payment for all or some of the hours that limited markets operations occur.

The adjustment referred to in subsection 6(d) of the Section 202.7 of the ISO rules is the adjustment to loads on the margin. Since the calculation for the adjustment to loads on the margin depends on data exchange between the Energy Trading System and the Dispatch Tool, when either one of these systems is unavailable, the calculation may be incorrect. Therefore it may be necessary to suspend the adjustment for all or some of the hours that limited markets operations occur.

# 6 Termination of State of Limited Markets Operations

When access is restored to the market operating tools, the AESO terminates limited markets operations, and issues a declaration as soon as possible, using the methods outlined in subsection 3(5) of section 202.7 of the ISO rules.

# 7 State of Markets Suspension

The AESO only uses markets suspension as outlined in subsection 8 of Section 202.7 of the ISO rules, when it is not possible to continue limited markets operations, or when the interconnected electric system is not in a state that makes normal markets operations possible.

# 8 Effect of the State of Markets Suspension

During a state of markets suspension, the AESO may not follow any merit order (i.e. energy market merit order, ancillary services merit order or dispatch down service merit order) and is primarily focused on maintaining or restoring system reliability through the issuance of directives for energy supply and ancillary services.

# 9 System Marginal Price during State of Markets Suspension

When markets suspension is in effect, the AESO determines the system marginal price based on the prior thirty (30) day average on peak or off peak price as described in subsection 11. These daily thirty (30) day average prices are posted on the AESO website.

# **10 Operating Cost Recovery**

Subsection 12 of Section 202.7 of the ISO rules outlines a cost recovery payment mechanism to allow a market participant to recover any shortfall between the energy receipts and its operating costs while generating during a market suspension. The intent of the mechanism is to keep the market participant whole, to the extent that energy receipts received do not cover its operating costs.

# 11 Termination of State of Markets Suspension

The AESO terminates the state of markets suspension when the interconnected electric system is in a reliable state, access to the markets operations tool is available, and the AESO deems that normal markets operations can be resumed. The AESO issues a declaration of the termination of markets suspension as soon as possible, using the methods described in subsection 9(5) of Section 202.7 of the ISO rules. The declaration specifies a time and date when normal markets operations resumed.

# **Revision History**

Posting Date	Description of Changes
2024-04-05	Revisions to section 5 to include treatment of ALM under limited market operation.
2015-11-26	New document created to support ISO Rule section 202.7.
2015-04-16	Administrative updates, removal of authoritative language.