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1 Purpose

This information document relates to the following authoritative documents:

- Section 202.4 of the ISO rules, *Long Lead Time Energy* (“Section 202.4”);
- Section 203.1 of the ISO rules, *Offers and Bids for Energy* (“Section 203.1”); and
- Section 206.2 of the ISO rules, *Interim Supply Cushion Directives* (“Section 206.2”).

The purpose of this information document is to provide additional information about the application of the above sections of the ISO rules to long lead time assets. This information document is likely of most interest to pool participants who own or operate long lead time assets.

2 Background

The definition of long lead time asset is set out in the AESO’s Consolidated Authoritative Document Glossary (CADG) and includes two subsections. Further information on the subsections contained in the definition of long lead time asset is found in sections 3 and 4 of this Information Document below.

3 Long Lead Time Assets Which Take More Than 1 Hour to Synchronize

This section provides additional information in relation to source assets that meet the criteria of subsection (i) of the long lead time asset definition.

A source asset that meets the criteria of subsection (i) of the long lead time asset definition may also be considered an eligible long lead time asset as defined in the CADG and subject to the requirements under Section 206.2.

3.1 Initial Start-up Time

Pool participants for pool assets with offers are required to submit an initial start-up time into the Energy Trading System, indicating the time, in hours, required for the source asset to synchronize to the interconnected electric system from an offline state. An initial start-up time greater than 1 hour indicates that the source asset falls into subsection (i) of long lead time asset. The AESO expects that the initial start-up time submitted accurately portrays the length of time required for a source asset to synchronize to the grid under normal operating conditions from a cold state. Note that the AESO uses the initial start-up time to determine eligible start times, including timing related to communicating unit commitment directives for eligible long lead time assets under Section 206.2.

3.2 Start Time

As set out in subsection 3(1) of Section 202.4, source assets that fit the criteria of subsection (i) of the long lead time asset definition must have a start time in the Automatic Dispatch and Messaging System (ADaMS) in order to receive an energy market dispatch where the long lead time asset was previously not synchronized. Source assets that fit the criteria of subsection (i) of the long lead time asset definition are expected to enter a start time that reflects the time the source asset is anticipated to be synchronized. The AESO expects that the start time submitted to ADaMS reflects the best information available to the pool participant considering intentions to synchronize at a given time, energy market offers, and the initial start-up time duration.

A start time does not need to be submitted to ADaMS following receipt of a unit commitment directive in order for the eligible long lead time asset to synchronize at the start time set out in the directive.

4 Long Lead Time Assets with Varying Start-up Times for its MW

This section provides additional information on a long lead time asset that is synchronized to the grid but is only providing a portion of its MW within that hour, with remaining distinct portion(s) of its energy requiring more than 1 hour to be delivered.

4.1 Available Capability Restatements

Source assets that fit the criteria in subsection (ii) of the long lead time asset definition should reflect the availability of their additional energy through the use of available capability restatements. This might include a source asset with multiple generating units where MW could not be available from a second generating unit for at least 1 hour from a cold start, because its operation is dependent on the operation of another generating unit, e.g., a combined cycle source asset where the steam generating unit is dependent on the operation of a gas generating unit.

The following is an example of what a pool participant's submissions in the Energy Trading System would look like to receive a dispatch for their additional long lead time energy, as set out in subsection 4(3) of Section 202.4.

Note: Source assets that are synchronized to the grid and have varying start times for distinct portions of their MW but where start times are all less than 1 hour do not qualify as long lead time assets. The example below does not apply to them.

Ex. A long lead time asset consists of 2 generating units. The first can be synchronized to the grid in 30 minutes and is capable of generating 100 MW. The second generating unit can only be started after the first generating unit is synchronized and takes an additional 2 hours to start, eventually generating 50 MW.

When this long lead time asset is synchronized with the first generation unit online, AC=100 MW. To receive a dispatch for the additional 50 MW from the second generating unit, at least 2 hours prior to the settlement interval the pool participant restates their available capability up to 150 MW starting in the settlement interval in which the pool participant expects to receive a dispatch for the energy it is not currently delivering.

4.2 Offers

Although the situation described in Section 4.1 constitutes an acceptable operational reason, long lead time assets are subject to subsection 3(4)(a) of Section 203.1 which requires a pool participant to ensure that the total offered MW is equal to the maximum capability of the source asset. This applies even when the source asset is a long lead time asset with additional capacity not currently reflected in the available capability. In the example used above, the sum of all offers must be 150 MW, even if the second generating unit is offline. See ID# 2012-009R *Restatements* for an example of how these offers appear in the merit order when available capability does not equal maximum capability.

Revision History

Posting Date	Description of Changes
2024-08-22	Updated relevant sections of the ISO rules and wording of purpose in Section 1. Updated information about submitting initial start-up time and start time in Section 3. Administrative amendments.
2024-04-05	Administrative amendments to align with the Energy Storage ISO Rule amendments and new definitions.

2023-03-31	Updated Section 4.1 to align with the administrative amendment filing.
2013-01-08	Initial Release