

ISO Rules

Part 200 Markets

Division 203 Energy Market

Section 203.5 Energy Market Mitigation



External Consultation Draft
August 31, 2018

Applicability

- 1 Section 203.5 applies to:
- (a) a **pool participant** that submit **offers** in the energy market for a **source asset** ;
 - (b) the **legal owner** of a **generating unit** or **aggregated generating facility**; and
 - (c) the **ISO**.

Requirements

Expected Supply Cushion for Mitigation

- 2(1) The **ISO** must:
- (a) publish the method for calculating the expected supply cushion on the AESO website; and
 - (b) provide 120 days' notice to **pool participant** before changing to the method for calculating the expected supply cushion published in accordance with subsection 2(1)(a).
- (2) The **ISO** must, for each **settlement interval**:
- (a) calculate the expected supply cushion using the method published in accordance with subsection 2(1)(a);
 - (b) publish the expected supply cushion on the AESO website prior to the **settlement interval**;
 - (c) update the expected supply cushion as soon as reasonably practicable upon a change to 1 or more of the inputs to the calculation of the expected supply cushion;.
 - (d) select a value of the expected supply cushion observed during the two hours immediately prior to the **settlement interval**;
 - (e) publish the value of the expected supply cushion which is selected for each **settlement interval** under subsection 2(2)(d) as soon as reasonably practicable after such selection is made.

Asset-Specific Cost Information –Generating Unit or Aggregated Generating Facility

3(1) A **pool participant** must submit to the **ISO**, in the manner the **ISO** specifies, the following cost information related to the short-run marginal costs for a thermal **generating unit or aggregated generating facility**:

- (a) heat rate;
 - (b) if the **source asset**'s fuel is not natural gas, fuel cost;
 - (c) financial exposure to greenhouse gas emissions costs; and
 - (d) any further cost information the **ISO** specifies.
- (2) A **pool participant** must, in relation to the cost information submitted pursuant to subsection 3(1):
- (a) submit the cost information to the **ISO**:
 - (i) for a **generating unit** or **aggregated generating facility** that has energized and commissioned, on or before a date the **ISO** specifies; or

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- (ii) for a **generating unit** or **aggregated generating facility** that has not completed energization and **commissioning**, before the energization and **commissioning** of such **generating unit** or **aggregated generating facility**.
 - (b) determine the values of such cost information assuming that the **generating unit** or **aggregated generating facility** is operating under normal operating conditions at **maximum capability**; and
 - (c) submit updated cost information to the **ISO** as soon as reasonably practicable upon becoming aware of any material change in the cost information submitted in accordance with subsection 3(1).
 - (d) an attestation by a corporate officer of the **pool participant** that the cost information provided pursuant to subsection 3(1) is complete and accurate.
- (3) The **ISO** may, with respect to cost information submitted pursuant to subsection 3(1), exclude costs determined by the **ISO** to be unreasonable.
- (4) The **ISO** must select alternate values for the cost information submitted pursuant to subsection 3(1) if such costs have been excluded pursuant to subsection 3(3).
- (5) The **ISO** must:
- (a) identify the current carbon price from the appropriate public authority;
 - (b) identify the natural gas price for each **day** on a day-ahead basis, or as close to a day-ahead basis as reasonably practicable; and
 - (c) estimate the variable operations and maintenance costs for a **generating unit** or **aggregated generating facility** on a class-specific basis.

Asset-Specific Reference Price – Generating Unit or Aggregated Generating Facility

4(1) The **ISO** must, using the cost information derived pursuant to subsection 3, calculate an estimated short-run marginal cost for producing power, measured in dollars per MWh, for each **generating unit** or **aggregated generating facility** for each **settlement interval** as a sum of the following:

- (a) the heat rate multiplied by the fuel price, if applicable;
- (b) the exposure to greenhouse gas emissions costs multiplied by the carbon price from the appropriate public authority, if applicable; and
- (c) the estimated variable operations and maintenance cost.

(2) The **ISO** must, using the estimated short-run marginal costs derived pursuant to subsection 4(1), set the asset-specific reference price for each **generating unit** or **aggregated generating facility** for each **settlement interval** as an amount equal to:

- (a) the estimated short run marginal cost multiplied by 3, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 1,000 MW or greater;
- (b) the estimated short run marginal cost multiplied by 6, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW; and
- (c) the maximum permissible price for an **offer** made under section 203.1 of the **ISO rules, Offers and Bids for Energy**, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is less than 250 MW.

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Asset-Specific Reference Price – Prescribed Non-Thermal Generating Source Assets Capable of Storing Energy

5(1) The **ISO** may prescribe a set of non-thermal generating **source assets** to which this subsection 5 is applicable, provided that each generating **source asset** is capable of storing its fuel.

(2) The **ISO** must, if the **ISO** prescribes a set of generating **source assets** in accordance with subsection 5(1) publish the list of such prescribed generating **source assets** on the AESO website.

(3) The **ISO** must, subject to subsection 5(4), set the asset-specific reference price for generating **source assets** prescribed pursuant to subsection 5(1) for each **settlement interval** as an amount equal to:

- (a) the 30-day rolling average **pool price** most recently published by the **ISO** multiplied by 3, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 1,000 MW or greater;
- (b) the 30-day rolling average **pool price** most recently published by the **ISO** multiplied by 6, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW; and
- (c) the maximum permissible price for an **offer** made under section 203.1 of the **ISO rules, Offers and Bids for Energy**, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is less than 250 MW.

(4) Notwithstanding subsection 5(3), if a **pool participant**, for any generating **source asset** prescribed pursuant to subsection 5(1) for a **settlement interval**, has satisfied the asset-specific requirements for participation in the **ancillary services** market referred to in subsection 5(5), then the **ISO** must, set the asset-specific reference price for such generating **source asset** for the **settlement interval** as an amount equal to the maximum permissible price for an **offer** made under Section 203.1 of the **ISO rules, Offers and Bids for Energy**.

(5) The **ISO** must:

- (a) publish the asset-specific requirements for participation in the **ancillary services** market on the AESO website; and
- (b) provide 120 days' notice to **pool participants** before changing to the asset-specific requirements published in accordance with subsection 5(5)(a).

Asset-Specific Reference Price – Import Source Assets

6(1) The **ISO** must set the asset-specific reference price for each import **source asset** for each **settlement interval** as an amount equal to:

- (a) $MidC(on\ peak) + \min\{100, 3 * MidC(on\ peak)\}$, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 1,000 MW or greater;
- (b) $MidC(on\ peak) + \min\{100, 6 * MidC(on\ peak)\}$, if the expected supply cushion selected for the **settlement interval** under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW;

where *MidC(on peak)* is the day-ahead, on-peak price in the Mid-Columbia market for delivery on the same **day** as the energy market in Alberta;

or

- (c) the maximum permissible price for an **offer** made under section 203.1 of the **ISO rules, Offers and Bids for Energy**, if the expected supply cushion selected for the **settlement interval**

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interval under subsection 2(1)(d) is less than 250 MW.

Asset-Specific Reference Price – Limitations and Exemptions

7(1) Notwithstanding subsections 4, 5 and 6, the **ISO** must not set the asset-specific reference price for any **source asset** for any **settlement interval** as an amount:

- (a) less than \$25/MWh; or
- (b) greater than the maximum permissible price for an **offer** made under section 203.1 of the **ISO rules**, *Offers and Bids for Energy*.

(2) A **pool participant** may request that the **ISO** provide a variance from any asset-specific reference price determined pursuant to subsections 4, 5, or 6.

(3) The **ISO** may, upon receiving a request pursuant to subsection 7(2), assign a different asset-specific reference price determined pursuant to subsections 4, 5, or 6 if the **ISO** is satisfied that the **pool participant** would not be able to reasonably recover the short run marginal costs and cycling costs of the **source asset** within the scope of the asset-specific reference price determined pursuant to subsections 4, 5, or 6.

Market Power Screen

8(1) The **ISO** must identify those **persons**, using the methodology for the calculation of market share offer control described in section 5 of the *Fair, Efficient, and Open Competition Regulation*, that have offer control over one or more **source assets** for the purposes of identifying a **person** as having market power.

(2) The **person** identified under subsection 8(1) may submit to the **ISO**, in the manner the **ISO** specifies, **supply obligations** in MW for each **settlement interval**, at least 2 hours prior to the start of the **settlement interval**, for the purposes of the expected residual supply index.

(3) A **person** who submits **supply obligations** in accordance with subsection 8(2) must submit a value that is equal to or less than the **person's** actual **supply obligations**.

(4) The **ISO** must, for each **person** identified under subsection 8(1) and in the **offer control information** for an **operating block** in respect of a **settlement interval**, calculate a value called the expected residual supply index for each **settlement interval** for the **person** identified under subsection 8(1) as follows:

- (a) the expected supply from all **source assets** for the **settlement interval**;
- (b) minus the expected supply from all **source assets** under the offer control of a **person** identified under subsection 8(1), net of the **supply obligations** of the **person** identified under subsection 8(1), for the **settlement interval**; and
- (c) divided by expected demand from all **sink assets** for the **settlement interval**.

(5) The **ISO** must select the expected residual supply index referenced in subsection 8(1) during the 2 hours immediately prior to the **settlement interval**.

(6) The **ISO** must identify a **person** with a expected residual supply index of less than 1 for a given **settlement interval** as having market power in that **settlement interval**.

(7) The **ISO** must not reconsider the conclusion drawn under subsection 8(4) if market conditions change at any time after the expected residual supply index is selected for the **settlement interval** under subsection 8(3).

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Mitigation of Market Power

9(1) The **ISO** must, for each **settlement interval**, identify each **operating block** associated with a **source asset** under the offer control of a **person** identified under subsection 8(4) that has an **offer** price that is greater than the asset-specific reference price of the related **source asset** which was determined pursuant to subsections 4, 5, or 6.

(2) Subject to subsection 9(3), the **ISO** must change the **offer** price of an **operating block** identified under subsection 9(1) to the asset-specific reference price of the associated **source asset** as determined under subsection 4, 5 or 6 if the **operating block** is:

- (a) controlled by a single **person** that has been identified as having market power under subsection 8(4),
- (b) controlled by multiple **persons** which have all been identified as having market power under subsection 8(4), or
- (c) declared to be inflexible in accordance with Section 203.1 of the **ISO rules**, *Offers and Bids for Energy*, and is at least partially controlled by a **person** that has been identified as having market power under subsection 8(4).

(3) The **ISO** must, if an **operating block** identified under subsection 9(1) is declared to be flexible under Section 203.1 of the **ISO rules**, *Offers and Bids for Energy*, and is partially, but not fully, controlled by one or more **person** identified as having market power under subsection 8(4), split the existing **operating block** into two **operating blocks** as follows:

- (a) create a new **operating block** that contains the quantity of the existing **operating block** that is controlled by the **person** identified as having market power under subsection 8(4) and select an **offer** price equal to the asset-specific reference price of the associated **source asset**; and
- (b) reduce the quantity of the existing **operating block** by the quantity of the newly created **operating block**, with no associated change made to the **offer** price of the **operating block**.

Timely Information from Legal Owner

10 A **legal owner** of a **generating unit or aggregated generating facility** must, if it is not the **pool participant** for that **generating unit or aggregated generating facility**:

- (a) provide such timely and complete information to the pool participant for such source asset to enable the pool participant to comply with its obligations under subsection 3; and
- (b) provide an attestation to the **pool participant** from a corporate officer of the **legal owner** of such **generating unit or aggregated generating facility** to enable the **pool participant** to comply with its obligations under subsection 3(2)d.

Revision History

Date	Description
yyyy-mm-dd	Initial release.