ISO Rules
Part 200 Markets
Division 207 Demand Curve Parameters
Section 207.1 Resource Adequacy Model

Draft Version

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Applicability

1(1) Section 207.1 applies to:

(a) the **ISO**.

(2) This section 207.1 applies to the following auctions:

(a) the **base auction** and **rebalancing auction** for the 2021/2022 **obligation period**;

(b) the **base auction** and **rebalancing auction** for the 2022/2023 **obligation period**;

(c) the **base auction** and **rebalancing auction** for the 2023/2024 **obligation period**;

(d) the **base auction** and the **rebalancing auctions** for the 2024/2025 **obligation period**;

(e) the **base auction** and the first **rebalancing auction** for the 2025/2026 **obligation period**;

(f) the **base auction** for the 2026/2027 **obligation period**; and

(g) the **base auction** for the 2027/2028 **obligation period**.

Requirements

Gross Minimum Procurement Volume

2 The **ISO** must, for each **base auction** and **rebalancing auction**, establish the gross minimum procurement volume as the volume that meets the **resource adequacy standard**.

Probabilistic Model

3(1) The **ISO** must, for the purposes of establishing the gross minimum procurement volume referred to in subsection 2, perform a probabilistic model of resource adequacy.

(2) The **ISO** must consider the following variables that impact supply and demand fundamentals in Alberta when developing the inputs for the probabilistic model referred to in subsection 3(1):

(a) the load forecast referred to in subsection 4;

(b) the **available capability** or available generation from all individual **generating units** and **aggregated generating facilities** in Alberta that the **ISO** anticipates will have, for the **obligation period**, a:

(i) **maximum capability** greater than or equal to 5 MW; or

(j) **uniform capacity value** that is greater than or equal to 1 MW;

(c) historical outages of thermal assets, including **automatic forced outages**, **delayed forced outages**, **planned outages** and ambient temperature derates, and any projected changes the **ISO** determines;

(d) historical performance of existing intermittent resources, including wind and solar, and any projected changes the **ISO** determines;

(e) anticipated performance of new intermittent resources, including wind and solar;

(f) historical performance of hydroelectric generation and any projected changes the **ISO**

determines;

(g) historical performance of cogeneration sites in Alberta and any projected changes the **ISO** determines;

(h) the correlation of load and generation at cogeneration sites in Alberta where the **ISO** determines correlation exists;

(i) historical performance of a load asset supplying **capacity** in the capacity market and any projected changes the **ISO** determines;

(j) the **available transfer capability** and import **offers**; and

(k) the amount of **regulating reserve**s required during energy emergency events as defined in **ISO rules** or **reliability standards**.

(3) The **ISO** may make assumptions as necessary about the model variables identified in subsection 3(2) in order to minimize model error and the risk of over procuring or under procuring **capacity** to the extent practicable.

(4) The **ISO** must add or subtract volumes of **capacity** from the probabilistic model referred to in subsection 3(1) to determine the gross minimum procurement volume that meets the **resource adequacy standard**.

Load Forecast

4 The **ISO** must, for the purpose of performing the probabilistic model in subsection 3, complete a forecast of load for a 5-year forward looking period that considers the following variables:

(a) economic growth indicators in Alberta including real gross domestic product, population, employment, and natural resource production;

(b) weather and temperature data selected from multiple locations across Alberta;

(c) load variations in Alberta based on calendar variables, including **month** of the year, **day** of the week, **hour** of the **day**, daylight savings, and holidays;

(d) historical load behaviour in Alberta and any projected changes the **ISO** determines;

(e) performance data from load assets that:

(i) are qualified to participate in the capacity market to supply **capacity** and any projected changes the **ISO** determines; or

(ii) have historically demonstrated price responsive behaviour and any projected changes the **ISO** determines;

(f) load forecast uncertainty reflecting variability in the load forecast due to weather and economic forecasts; and

(g) any other variables that, in the **ISO**'s determination, may improve the accuracy of the load forecast model.

Filing of Gross Minimum Procurement Volume

5 The **ISO** must, no later than 4 **months** prior to the commencement of the qualification process for a **base auction** or **rebalancing auction** file the gross minimum procurement volume for such **base auction** or **rebalancing auction** that is determined in accordance with this section 207.1 with the **Commission** for approval.

Revision History

Date	Description
yyyy-mm-dd	Initial release