

ISO Rules

Part 200 Markets

Division 207 Demand Curve Parameters

Section 207.4 Shape of Demand Curve



Draft Version
Posted January 2019

Applicability

- 1(1)** Section 207.4 applies to:
- (a) the **ISO**.
- (2)** This section 207.4 is in effect for 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 **rebalancing auctions** for the 2024/2025 **obligation period**;
 - (e) the **base auction** and **rebalancing auctions** for the 2025/2026 **obligation period**;and
 - (f) the **base auction** and **rebalancing auctions** for the 2026/2027 **obligation period**.

Requirements

Establish Preliminary Demand Curve

- 2(1)** The **ISO** must, for each **base auction** and **rebalancing auction**, establish a preliminary downward-sloping convex demand curve with the following parameters:
- (a) a horizontal section from 0 MW to the estimate of the net minimum procurement volume in subsection 3(1), at a price cap that is the greater of:
 - (i) 1.75 times the adjusted net-CONE in subsection 4; or
 - (ii) 0.5 times gross-CONE established for the **obligation period** in accordance with Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* divided by the performance factor in subsection 4(b);
 - (b) a downward-sloping section from the estimate of the net minimum procurement volume in subsection 3(1) at the price cap in subsection 2(1)(a) to an inflection point set at a multiple of 0.875 times the adjusted net-CONE in subsection 4 at a quantity 7% above the estimate of the net minimum procurement volume in subsection 3(1); and
 - (c) a downward sloping section from the inflection point in subsection 2(1)(b) to a price floor of zero dollars at a quantity 18% above the estimate of the net minimum procurement volume in subsection 3(1).
- (2)** The **ISO** must publish the preliminary demand curve for the relevant **base auction** or **rebalancing auction** prior to the commencement of the qualification process for such **base auction** or **rebalancing auction**.

Net Minimum Procurement Volume

- 3(1)** The **ISO** must, in establishing the preliminary demand curve under subsection 2(1), calculate an estimate of the net minimum procurement volume in accordance with the formula in subsection 3(2) using the best estimate of **uniform capacity values** that the **ISO** determines.
- (2)** The **ISO** must, after **uniform capacity values** are assigned in accordance with Section 206.3 of the **ISO rules**, *Uniform Capacity Value Determination*, adjust the gross minimum procurement volume

ISO Rules

Part 200 Markets

Division 207 Demand Curve Parameters

Section 207.4 Shape of Demand Curve



established for each **base auction** or **rebalancing auction** to a net minimum procurement volume in accordance with the following formula:

$$\text{Net minimum procurement volume}_t = \sum (\text{maximum capability}_i \times \text{performance factor}_i)$$

where:

- (a) *maximum capability_i* is the **maximum capability** of asset *i* modelled in the probabilistic model for the **obligation period *t***;
- (b) *performance factor_i* is for asset *i* modelled in the probabilistic model:
 - (i) the average availability factor or the average capacity factor of asset *i* calculated in accordance with Section 206.3 of the **ISO rules**, *Uniform Capacity Determination* for asset *i* modeled in the probabilistic model;
 - (ii) the best estimate of the performance factor for asset *i* modelled as determined by the **ISO** in the event that a performance factor was not calculated for asset *i* pursuant to Section 206.3 of the **ISO rules**, *Uniform Capacity Determination*;
 - (iii) 0, for:
 - (A) assets modelled in the probabilistic model that are not eligible to participate in the capacity market; and
 - (B) for a **generating unit** or an **aggregated generating facility** connected to the **interconnected electric system** that supplies electric energy for one or more onsite load assets, and where such site has an associated **source asset**.

Adjusted Net-CONE

4 The **ISO** must adjust the net-CONE established for each **obligation period** pursuant to Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* in accordance with the following formula:

$$\text{adjusted net-CONE}_t = \frac{\text{net-CONE}_t}{\text{performance factor}}$$

where:

- (a) *net-CONE_t* is the net-CONE value established pursuant to Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* in \$/kW-year for **obligation period *t***; and
- (b) *performance factor* is 0.8.

Establish Final Demand Curve for Base Auction and Rebalancing Auction

5(1) The **ISO** must, for each **base auction** and **rebalancing auction**, establish a final downward-sloping convex demand curve with the following parameters:

- (a) a horizontal section from 0 MW to the net minimum procurement volume in subsection 3(2), at a price cap that is the greater of:
 - (i) 1.75 times the adjusted net-CONE in subsection 4; or
 - (ii) 0.5 times gross-CONE established for the **obligation period** in accordance with Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* divided by the performance factor in subsection 4(b);

ISO Rules

Part 200 Markets

Division 207 Demand Curve Parameters

Section 207.4 Shape of Demand Curve



- (b) a downward-sloping section from the net minimum procurement volume in subsection 3(2) at the price cap in subsection 5(1)(a) to an inflection point set at 0.875 times the adjusted net-CONE in subsection 4 at a quantity 7% above the net minimum procurement volume; and
- (c) a downward sloping section from the inflection point referred to in subsection 5(1)(b) to a price floor of zero dollars at a quantity 18% above the net minimum procurement volume in subsection 3(2).

(2) The **ISO** must publish the final demand curve no later than 1 month prior to the opening of the offering window for each **base auction** or **rebalancing auction**.

Revision History

Date	Description
yyyy-mm-dd	Initial release