

# ISO Rules

## Part 100 General

### Division 103 Administration

#### Section 103.11 Capacity Market Financial Security Requirements



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#### Applicability

- 1 Section 103.11 applies to:
- (a) a **capacity market participant**; and
  - (b) the **ISO**.

#### Requirements

##### Provision of Financial Security

- 2 A **capacity market participant** must provide to the **ISO**, or cause its guarantor to provide to the **ISO**, any **financial security** which the **capacity market participant** is required to provide, or is requested by the **ISO** to provide, pursuant to this section 103.11.

##### Financial Security for the Payment Adjustment Balance Limit

- 3(1) The **ISO** must calculate the **financial security** in dollars for the payment adjustment balance limit for an asset subject to a **capacity commitment** in accordance with the following formula:

$$\text{payment adjustment balance security}_{it} = \text{payment adjustment balance limit}_{it} - \text{forecast payment adjustment balance}_{it}$$

where:

- (a) *payment adjustment balance limit<sub>it</sub>* is the amount in dollars for asset *i* in **obligation period t** calculated in subsection 3(2); and
  - (b) *forecast payment adjustment balance<sub>it</sub>* is the amount in dollars determined by the **ISO** for asset *i* in **obligation period t** based on:
    - (i) the **capacity commitment** associated with asset *i* for the current and future **obligation periods**;
    - (ii) the **capacity payment** for asset *i* for the current and future **obligation periods**; and
    - (iii) an estimate of the asset's under-availability adjustments for the current **obligation period t**.
- (2) The **ISO** must, in calculating the payment adjustment balance security in subsection 3(1), calculate the payment adjustment balance limit in dollars in accordance with the following formula:

$$\text{payment adjustment balance limit}_{it} = \text{capacity payment}_{i,t+1} \times \text{negative factor} \times 12 \times 1.3$$

where:

- (a) *capacity payment<sub>i,t+1</sub>* is the **capacity payment** in dollars for asset *i* for the next **obligation period t+1**; and
- (b) *negative factor* is:

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- (i) -1, if the **capacity payment** is positive; or
- (ii) +1, if the **capacity payment** is negative.

- (3) The **ISO** may, if the payment adjustment balance security calculated in subsection 3(1) is positive at any time prior to or during an **obligation period**, request the **capacity market participant** to provide **financial security** to the **ISO** in the amount of the payment adjustment balance security.
- (4) A **capacity market participant** that has been issued a request in accordance with subsection 3(3) must provide **financial security** in the amount of the payment adjustment balance security to the **ISO** on or before the date specified in the **ISO**'s request.
- (5) The **ISO** may reduce the amount of **financial security** required to be provided by a **capacity market participant** in accordance with subsection 3(4) if:
- (a) the **capacity payment** for the next **obligation period** is greater than the **capacity payment** for the current **obligation period**; and
  - (b) requested by the **capacity market participant**.
- (6) The **ISO** may, at the start of an **obligation period**, request a **capacity market participant** to provide **financial security** to the **ISO** in the amount of the **capacity payment** multiplied by 12 for an asset:
- (a) subject to a **capacity commitment** and with a **capacity payment** of \$0; or
  - (b) with a negative **capacity payment**.
- (7) The **ISO** may, during an **obligation period** and upon or after receipt of a payments made by the **capacity market participant** to the **ISO**, reduce the amount of **financial security** required under this section 103.11 by the amount of the payment made by the **capacity market participant**.

#### Financial Security for New Capacity, Refurbished Capacity and Incremental Capacity Prior to a Base Auction or Rebalancing Auction

- 4(1) The **ISO** may, within the timelines prescribed in the *Capacity Market Auction Guidelines*, request a **capacity market participant** to provide **financial security** to the **ISO** for the security requirement amounts determined in subsections 4(3), 4(5) or 4(6), as applicable, in respect of an asset with **new capacity**, refurbished **capacity** or incremental **capacity** that is not energized and **commissioned** at the time of the **base auction** or **rebalancing auction**.
- (2) A **capacity market participant** that has been issued a request in accordance with subsection 4(1) must provide **financial security** in the amounts determined in subsections 4(3), 4(5) or 4(6), as applicable, on or before the date specified in the **ISO**'s request.
- (3) The **ISO** must calculate the security requirement in dollars for an asset with **new capacity** in accordance with the following formula:

$$security\ requirement_{it} = \frac{gross-CONE_t}{capital\ recovery\ factor_t} \times uniform\ capacity\ value_{it} \times 0.05$$

where:

- (a)  $gross-CONE_t$  is the gross-CONE value in \$/kW-year for **obligation period**  $t$  established in accordance with Section 207.3 of the **ISO rules**, *Calculation of Net-CONE*;

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- (b) *capital recovery factor<sub>t</sub>* is the value calculated in subsection 4(4) for **obligation period t**; and
- (c) *uniform capacity value<sub>it</sub>* is the **uniform capacity value** in kW assigned to asset *i* with **new capacity** for **obligation period t**.

(4) The **ISO** must, in calculating the security requirement in subsection 4(3), calculate the capital recovery factor in accordance with the following formula:

$$\text{capital recovery factor}_t = \frac{\{ \text{discount rate}_t \times (1 + \text{discount rate}_t)^{\text{plant life}} \}}{\{(1 + \text{discount rate}_t)^{\text{plant life}} - 1\}}$$

where:

- (a) *discount rate<sub>t</sub>* is the value used as the weighted average cost of capital for the gross-CONE value in Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* published by the **ISO** for **obligation period t**; and
- (b) *plant life* is 20 years.

(5) The **ISO** must calculate the security requirement in dollars from an asset with refurbished **capacity** in accordance with the following formula:

$$\text{security requirement}_{it} = \text{unit rate} \times \text{escalation rate}_t \times \text{uniform capacity value}_{it} \times 0.05$$

where:

- (a) *unit rate* is \$200/kW;
- (b) *escalation rate<sub>t</sub>* is the escalation rate value calculated in Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* for **obligation period t**; and
- (c) *uniform capacity value<sub>it</sub>* is the **uniform capacity value** in kW assigned to asset *i* with refurbished **capacity** for **obligation period t**.

(6) The **ISO** must calculate the security requirement for an asset with incremental **capacity** in accordance with the following formula:

$$\text{security requirement}_{it} = \text{unit rate} \times \text{escalation rate}_t \times \text{incremental capacity}_{it} \times 0.05$$

where:

- (a) *unit rate* is \$100/kW;
- (b) *escalation rate<sub>t</sub>* is the escalation rate calculated in Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* for **obligation period t**; and
- (c) *incremental capacity<sub>it</sub>* is the increase in **maximum capability** in kW of asset *i* qualified by the **ISO** in accordance with Section 206.1 of the **ISO rules**, *Qualification of Capacity* for **obligation period t**.

#### Adjusted Financial Security Following a Base Auction or Rebalancing Auction

**5(1)** The **ISO** must, if a **capacity market participant** provided **financial security** in accordance with subsection 4(2), establish the adjusted security requirement in dollars following a **base auction** or a

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rebalancing auction as:

- (a) \$0, if the **capacity market participant** elected to permanently delist the entire volume of **new capacity** or refurbished **capacity** for the asset in accordance with Section 206.1 of the **ISO rules**, *Qualification of Capacity*;
- (b) \$0, if the **capacity market participant** elected to permanently delist the incremental **capacity** for the asset in accordance with Section 206.1 of the **ISO rules**, *Qualification of Capacity*;
- (c) \$0, if the **capacity market participant** did not receive a **capacity commitment** following the last **rebalancing auction**;
- (d) \$0, if the **capacity market participant** achieved energization and **commissioning** for an asset;
- (e) the amount of the security requirement calculated in accordance to subsection 4(3), 4(5) and 4(6), if the **uniform capacity value** of the asset changes from the prior **base auction** or **rebalancing auction**; or
- (f) the amount of the reduced security requirement calculated in accordance with subsection 5(2), if a **capacity market participant** was determined to have met the applicable milestones before a **rebalancing auction** in accordance with Section 206.5 of the **ISO rules**, *Forward Period Milestone Assessment*.

(2) The **ISO** must if a **capacity market participant** was determined to have met applicable milestones in accordance with Section 206.5 of the **ISO rules**, *Forward Period Milestone Assessment* before a **rebalancing auction**, calculate the reduced security requirement in dollars for an asset with **new capacity**, refurbished **capacity** or incremental **capacity** that cleared a prior **base auction** or **rebalancing auction** in accordance with the following formula:

$$\text{reduced security requirement}_{it} = \text{security rate}_{it} \times \text{capacity commitment}_{it} \times \left( \frac{\text{remaining auctions}_t}{\text{total auctions}_t} \right)$$

where:

- (a)  $\text{security rate}_{it}$  is the rate in \$/kW calculated in subsection 5(3) for asset  $i$  in **obligation period**  $t$ ;
- (b)  $\text{capacity commitment}_{it}$  is the **capacity commitment** in kW associated with asset  $i$  for **obligation period**  $t$ ;
- (c)  $\text{total auctions}_t$  is the count of all **base auctions** and **rebalancing auctions**, regardless of the respective **obligation period**, from the **base auction** or **rebalancing auction** for which the initial security requirement was provided pursuant to subsection 4, to the start of **obligation period**  $t$  for which the initial security requirement was provided; and
- (d)  $\text{remaining auctions}_t$  is the greater of:
  - (i) the count of all **base auctions** and **rebalancing auctions**, regardless of the respective **obligation period**, from the **rebalancing auction** for which the reduced security requirement is being calculated, to the start of **obligation period**  $t$  for which the reduced security requirement is being calculated; or
  - (ii) 1.

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(3) The **ISO** must, when calculating the reduced security requirement in subsection 5(2), calculate the security rate in \$/kW in accordance with the following formula:

- (a) for an asset with **new capacity** that is subject to a **capacity commitment**:

$$security\ rate_t = \frac{gross-CONE_t}{capital\ recovery\ factor_t} \times 0.05$$

where:

- (i)  $gross-CONE_t$  is the gross-CONE value in \$/kW-year for **obligation period t** established in accordance with Section 207.3 of the **ISO rules**, *Calculation of Net-CONE*; and
  - (ii)  $capital\ recovery\ factor_t$  is the value calculated in subsection 4(4) for **obligation period t**;
- (b) for an asset with refurbished **capacity** that is subject to a **capacity commitment**:

$$security\ rate_t = unit\ rate \times escalation\ rate_t \times 0.05$$

where:

- (i)  $unit\ rate$  is \$200/kW; and
  - (ii)  $escalation\ rate$  is the escalation rate calculated in Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* for **obligation period t**;
- or
- (c) for an asset with incremental **capacity** that is subject to a **capacity commitment**:

$$security\ rate_t = unit\ rate \times escalation\ rate_t \times 0.05$$

where:

- (i)  $unit\ rate$  is \$100/kW; and
- (ii)  $escalation\ rate$  is the escalation rate calculated in Section 207.3 of the **ISO rules**, *Calculation of Net-CONE* for **obligation period t**.

(4) The **ISO** may, following a **rebalancing auction**, recalculate the amount of **financial security** that a **capacity market participant** is required to provide to the **ISO** based on the adjusted security requirement determined in subsection 5(1), as applicable.

(5) The **ISO** may, if an asset does not achieve energization and **commissioning** prior to the start of the **obligation period**, hold the **financial security** provided to the **ISO** in respect of such asset until after any under-delivery adjustment or over-delivery adjustment is determined for the **obligation period** in accordance with Section 206.8 of the **ISO rules**, *Obligation Period Performance Assessments*.

#### Revision History

Date	Description
yyyy-mm-dd	Initial release

ISO Rules  
Part 100 General  
Division 103 Administration  
Section 103.11 Capacity Market Financial Security  
Requirements

