

# ISO Rules

## Part 200 Markets

### Division 205 Ancillary Services

#### Section 205.6 Supplemental Reserve Technical Requirements and Performance Standards



#### Final Draft

#### Applicability

1 Section 205.6 applies to:

- (a) a **pool participant**; and
- (b) the **ISO**;

~~in relation to qualifying for, providing and utilizing supplemental reserve.~~

#### Requirements

##### General Application for Qualification to Provide Supplemental Reserve

~~2(1) A **pool participant asset** must be qualified by the **ISO** in order to provide that provides or anticipates providing **supplemental reserve**, must satisfy the technical requirements set out in this section 205.6 and must continue to satisfy such technical requirements while providing **supplemental reserve**.~~

~~(2) A **pool participant** seeking to have a **pool asset** qualified by the **ISO** to provide **supplemental reserve** must provide the **ISO** with:~~

- ~~(a) a completed application form, available on the AESO website; and~~
- ~~(b) the data and records that the **ISO** specifies in the application form.~~

##### Minimum Pool Asset Requirements Eligibility to Provide Supplemental Reserve

~~3(1) A **pool participant** seeking to have a **pool asset** qualified by the **ISO** to provide **supplemental reserve** must ensure that its **pool asset** has at least one (1) supplemental reserve resource that is at a minimum, is capable of providing:~~

- ~~(a) 5 MW in the case of **supplemental reserve** sourced from within the **balancing authority area** of the **ISO**, a minimum of five (5) MW of **supplemental reserve**; and~~
- ~~(b) the amount of **real power** applied for under subsection 2(2) for a period of sixty (60) minutes in the case of **supplemental reserve** sourced from outside the **balancing authority area** of the **ISO**, a minimum of ten (10) MW of **supplemental reserve**.~~

~~(2) A **pool participant** must ensure that its **pool asset** is capable of providing the amount of **real power** the **ISO** qualifies the **pool asset** to provide under subsection 4(1) for the period from ten (10) minutes after receiving a **directive** to provide **supplemental reserve** to sixty (60) minutes after receiving a **directive** to provide **supplemental reserve**.~~

~~(3) A **pool participant** must ensure that the **pool asset** complies with subsections 3(1) and 3(2) by measuring the gross **real power** of the **pool asset**.~~

##### ISO Qualifying Qualification of a Pool Asset to Provide Supplemental Reserve

~~4(1) The **ISO** may qualify a must, prior to any **pool asset** to providing **supplemental reserve** if one (1) or more **supplemental reserve resources** of the **pool asset** meet the eligibility criteria set out in subsection 3, assess the eligibility of such **pool asset** and determine the **real power** in MW it is qualified to provide.~~

~~(2) The **ISO** must, after qualifying a **pool asset** under subsection 4(1), in determining the **real power** quantity in MW that each **supplemental reserve resource** of thea of the **pool asset** is capable of~~

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providing qualified to provide, with consideration given to the following:

- (a) whether the supplemental reserve resource pool asset participates in a **remedial action scheme**;
- (b) the total **operating reserve** that could be lost during a single **contingency**; ~~and~~
- (c) the maximum **real power** capability and minimum **real power** capability of each supplemental reserve resource of the pool asset; ~~and~~
- (d) any other factor that the ISO considers relevant.

(3) The **ISO** must advise a **pool participant** whether it of the eligibility of the pool asset is qualified to provide supplemental reserve within sixty (60) **days** of the **ISO** receiving an a completed application under subsection 2(2) for supplemental reserve.

#### **Applying Performance Requirements when under Dispatch to Provide Supplemental Reserve**

**5(1)** A **pool participant** must ensure that, following the receipt of a dispatch may apply to provide supplemental reserve by completing and providing to the ISO the documents the ISO specifies and posts on the AESO website, one (1) or more supplemental reserve resources of the pool asset are positioned to provide the real power set out in the dispatch, within a total tolerance of minus:

- (a) 1 MW for a dispatch of less than or equal to 20 MW; or
- (b) 5% of the dispatch quantity for a dispatch greater than 20 MW.

**(2)** A **pool participant** must ensure that each **supplemental reserve resource** being used to provide **supplemental reserve** meets the requirements set out in subsection 5(1) beginning at:

- (a) the time stated in the dispatch, for a dispatch with a time more than fifteen (15) minutes from the time the pool participant receives the dispatch; or
- (b) the time stated in the dispatch or as soon as possible thereafter, but in any event, not more than fifteen (15) minutes after receiving the dispatch, for a dispatch with a time fifteen (15) minutes or less from the time the pool participant receives the dispatch.

**(3)** A **pool participant** will not be paid for **supplemental reserve** unless the **pool participant** ensures that the **supplemental reserve resources** being used to provide **supplemental reserve** meet the requirements set out in subsections 5(1) and 5(2).

#### **Performance Requirements when Responding to a Directive to Provide Supplemental Reserve to a Dispatch**

**6(1)** A **pool participant** must, within ten (10) minutes following receipt of a **directive** to provide **supplemental reserve**, ensure that its **pool asset** is providing a quantity of **real power** equal to the instantaneous amount of **real power** of the **pool asset** at the time of the **directive** and the amount of **real power** set out in the **directive**. ~~will not be paid for supplemental reserve unless the pool participant ensures that:~~

- (a) ~~upon receipt of a dispatch to provide supplemental reserve, if the time stated in the dispatch for the pool asset to be in position to provide the real power quantity indicated in the dispatch is:~~
  - (i) ~~more than fifteen (15) minutes from the time the pool participant receives the dispatch, the pool asset is in position at the time stated in the dispatch; or~~
  - (ii) ~~fifteen (15) minutes or less from the time the pool participant receives the dispatch, the~~

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~~pool asset is in position at the time stated in the dispatch or as soon as possible thereafter but in any event, not more than fifteen (15) minutes after receiving the dispatch; and~~

~~(b) the pool asset maintains the ability to provide the real power quantity corresponding to the dispatch quantity, as measured in accordance with subsection 3(3):~~

~~(i) by the times set out in subsections 6(1)(a)(i) or (ii); and~~

~~(ii) within a tolerance of minus:~~

~~(A) one (1) MW for a dispatch of less than or equal to twenty (20) MW; or~~

~~(B) five percent (5%) for a dispatch greater than twenty (20) MW;~~

~~for as long as the dispatch is in effect.~~

(2) A pool participant must ensure that, from the first time its pool asset achieves the response set out in subsection 6(1) to the time fifteen (15) minutes following receipt of the directive, the pool asset is providing an average response equal to or greater than the amount of real power set out in the directive.

(3) A pool participant must ensure that, for each consecutive ten (10) minute interval beginning fifteen (15) minutes following the receipt of a directive, the average response from the pool asset equals the amount of real power set out in the directive, within a tolerance of plus or minus:

(a) 5 MW for a pool asset with a maximum capability of 200 MW or less; or

(b) 10 MW for a pool asset with a maximum capability of greater than 200 MW.

(4) Where a pool asset does not have a maximum capability, the tolerances set out in subsection 6(3) will be measured against the maximum qualified facility capacity of the pool asset prescribed by the ISO.

(5) A pool participant must ensure that its pool asset continues to meet the requirements set out in subsection 6(3) for as long as the directive to provide supplemental reserve is in effect.

(6) A pool participant must ensure that its pool asset is in the position set out in subsection 5(1) as soon as possible or, in any event, not more than fifteen (15) minutes after receiving a cancellation of the directive for supplemental reserve.

#### Performance Requirements Measuring Response to a Directive

~~7(1) A pool participant must, within ten (10) minutes after receiving a directive to provide supplemental reserve, ensure that each the pool asset complies with the requirements set out in subsection 6 as measured at: is providing a quantity of real power equal to the instantaneous amount of real power of the pool asset at the time of the directive plus the amount of real power set out in the directive, as measured in accordance with subsection 3(3).~~

(a) the stator winding terminals of the generating unit;

(b) the circuit breaker or disconnection device that is electrically closest to each load;

(c) the alternating current terminal closest to each inverter based technology;

(d) the collector bus for aggregated generating facilities; or

(e) a point designated by the ISO.

(2) A pool participant must ensure that, from the first time the pool asset achieves the quantity of real power set out in subsection 7(1) to the time fifteen (15) minutes after the time of the directive, the

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average quantity of **real power** provided by the **pool asset** is equal to or more than the quantity set out in subsection 7(1), as measured in accordance with subsection 3(3).

~~(3) — A **pool participant** of a **pool asset** must ensure that, for each consecutive ten (10) minute interval starting fifteen (15) minutes following the receipt of a **directive**, the average **real power** from the **pool asset** equals the quantity set out in subsection 7(1), as measured in accordance with subsection 3(3), within a tolerance of:~~

- ~~(i) — five (5) MW for a load **pool asset** or a generating **pool asset** with a **maximum capability** of two hundred (200) MW or less; or~~
- ~~(ii) — ten (10) MW for a **pool asset** with a **maximum capability** of greater than two hundred (200) MW.~~

~~(4) — Notwithstanding subsection 3(2), a **pool participant** must ensure the **pool asset** continues to provide the average **real power** set out in subsection 7(3) for as long as the **directive** is in effect.~~

~~(5) — Notwithstanding subsections 7(1) through 7(4), a **pool participant** following the receipt of a **directive** for **supplemental reserve** to zero (0) must as soon as possible after receiving the **directive** to zero (0) MW, and, in any event, not more than fifteen (15) minutes after receiving the **directive** to zero (0) MW:~~

- ~~(a) — ensure the generating **pool asset** is within the **allowable dispatch variance** of its current energy **dispatch**; or~~
- ~~(b) — ensure the load **pool asset** is in position to provide the **real power** quantity indicated in its current **dispatch** for **supplemental reserve**.~~

#### Test Requirements

8 The ISO may request ~~that~~ a **pool participant** to test a supplemental reserve resource's pool asset's responses to dispatches and directives:

- (a) prior to allowing the supplemental reserve resource pool asset to provide **supplemental reserve**; or
- (b) if the ISO provides evidence that the **supplemental reserve resource** exhibits behaviour that is inconsistent with the requirements of this ~~s~~Section 205.6; or
- (c) if the ISO otherwise determines that such testing is necessary.

#### Maintaining Eligibility to Provide Supplemental Reserve

9(1) The ISO may issue a notice suspending the ability of, if a pool participant to provide supplemental reserve if the pool participant does not refuses to comply with:

- (a) ~~refusing to comply with~~ a testing request pursuant to subsection 8;
- (b) any other provision of this ~~s~~Section 205.6; or
- (c) other ISO rules that affect the provision of **supplemental reserve**;

~~provide notice to the **pool participant** that it cannot participate in the **supplemental reserve** market until the **pool participant** is compliant with this section 205.6 and all other **ISO rules** that affect the provision of **supplemental reserve**.~~

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(2) A **pool participant** that has received a suspension notice pursuant to subsection 9(1) ~~must~~may not submit an **offer** for **supplemental reserve** until the **ISO** confirms the **pool participant** is compliant with this ~~s~~Section 205.6 and all other **ISO rules** that affect the provision of **supplemental reserve**.

#### Revision History

<u>Effective</u> <del>Date</del>	Description
<u>2018-02-01</u>	<u>Revised requirements to be technology agnostic.</u>
2014-12-23	Initial release