

SRSG Operating Procedure No. 3
After-The-Fact Hourly Reserve Calculations

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1. Purpose

The purpose of this Operating Procedure No. 3 is to establish the methodology for calculating the after-the-fact hourly reserves.

2. General

A Party activating its reserves to cover a Disturbance on its System shall not be penalized for a deficiency incurred due to the activation of such reserves within the first sixty (60) minute period following the time of the Disturbance; provided, such Party has reported the Disturbance via the Party site system. In addition, when a Party is supplying Emergency Assistance to another Party, the supplying Party will not be penalized for being deficient for the portion of reserves it has activated to supply such Emergency Assistance.

3. Calculations

3.1 The following criteria shall apply for a resource to qualify as Spinning Reserve:

3.1.1 Such resource shall be:

3.1.1.1 on line, and

3.1.1.2 unloaded, and

3.1.1.3 synchronized, and

3.1.1.4 immediately responsive, and

3.1.1.5 governor active, and

3.1.1.6 must have sufficient transmission to support the activation of such Spinning Reserve to the load center.

3.1.2 Dynamically scheduled resources may be counted as Spinning Reserve. Resources which are statically scheduled may not be counted as Spinning Reserve.

3.1.3 The amount of unloaded generation which is eligible to be counted towards Spinning Reserve is that amount which can be activated within ten (10) minutes (i.e. unit ramp rate * 10 minutes).

3.1.4 Spinning Reserve shall be determined as follows:

3.1.4.1 The capability of each on-line unit in 10 Minutes (exclude units connected by DC tie) defined as the lesser of:

3.1.4.1.1 Average ramp rate of a unit (MW/min) multiplied by 10 minutes; or

3.1.4.1.2 Hourly integrated capability of a unit minus hourly integrated output of a unit

3.1.4.2 Plus Spinning Reserve receipts (purchases)

3.1.4.3 Plus capacity of hydro units in Condense mode (that qualifies as Spinning Reserve) defined as the maximum capability of the unit, plus the load the unit is drawing while in condense mode.

3.1.4.4 Minus Spinning Reserve deliveries (sales)

3.2 The following criteria shall apply for a resource to qualify a resource as Non-Spinning Reserve

3.2.1 Such resource shall

3.2.1.1 have sufficient transmission to support the activation of the Non-Spinning Reserve to the load center, and

3.2.1.2 be capable of serving demand within ten minutes, and

3.2.1.3 must qualify as one of the following:

3.2.1.3.1 A resource not connected to the system, or

3.2.1.3.2 An interruptible load, or

3.2.1.3.3 A resource external to a Party's control area or pseudo control area which is statically scheduled, or

3.2.1.3.4 Unloaded generation that does not qualify as Spinning Reserve, but which is eligible to be counted towards Non-Spinning Reserve.

3.2.2 Non-Spinning Reserve shall be determined as follows:

3.2.2.1 The capability of each on-line unit in 10 Minutes which does not qualify for Spinning Reserve (i.e. units connected by DC tie and/or units not under governor action) which is defined as the lesser of

- 3.2.2.1.1 Average ramp rate of a Unit (MW/min) multiplied by 10 minutes; or
- 3.2.2.1.2 Hourly integrated capability of a unit minus hourly integrated output of a unit.
- 3.2.2.2 Plus for each on demand contract receipt (firm, contingent purchase) the lesser of
 - 3.2.2.2.1 Capacity minus scheduled energy; or
 - 3.2.2.2.2 Available energy in ten minutes based on contractual ramp rate.
- 3.2.2.3 Plus pump storage (units which do not qualify as spinning reserve) defined as the maximum capability of the unit in ten minutes, plus the hourly integrated pump load of the unit.
- 3.2.2.4 Plus SRSG non-firm deliveries defined as deliveries which are recallable in less than ten (10) minutes. Plus non-firm or recallable deliveries which can be curtailed in less than ten (10) minutes.
- 3.2.2.5 Plus interruptible load defined as hourly integrated load of customers that can be cut within ten (10) minutes.
- 3.2.2.6 Minus for each on demand contract delivery (firm, contingent sale) the lesser of
 - 3.2.2.6.1 Capacity minus Scheduled Energy, or
 - 3.2.2.6.2 Available energy in ten minutes based on contractual ramp rate.
- 3.2.2.7 Minus non-firm or recallable receipts.