

WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version ~~4~~5

Open: ~~November 15, 2011~~January 5, 2012 WECC Closed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC      Closed: February 20, 2012

Completed Actions	Completion Date
1. Post Draft Standard for initial industry comments	September 14, 2007
2. Drafting Team to review and respond to initial industry comments	November 20, 2007
3. Post second Draft Standard for industry comments	November 20, 2007
4. Drafting Team to review and respond to industry comments	January 25, 2008
5. Post Draft Standard for Operating Committee approval	January 25, 2008
6. Operating Committee approved proposed standard	March 6, 2008
7. Post Draft Standard for WECC Board approval	March 12, 2008
8. Post Draft Standard for NERC comment period	April 14, 2008
9. WECC Board approved proposed standard	April 16, 2008
10. NERC comment period ended	May 20, 2008
11. Drafting Team completes review and consideration of NERC industry comments	May 30, 2008
12. NERC Board approved the request; Request FERC approval	June 2008
13. Posting 1	January 17, 2011
14. Posting 1 Responses to Comments	March 21, 2011
15. Posting 2 Posted	March 11, 2011
16. Posting 2 Responses to Comments	April 14, 2011
17. OC Special Vote – Failed	May 19, 2011
18. Posting 3	September 19, 2011
19. Posting 3 Responses to Comments	November 15, 2011
20. Posting 4	November 15, 2011
21. Technical Conference / SLC	December 5, 2011
<u>22. Team finalizes Version 4 Responses and Version 5 for posting</u>	<u>January 4, 2012</u>

WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version 4-5

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

<u>22-23. Posting 4 Responses to Comments</u>	<u>January 4, 2012</u>
<u>24. Posting 5 at WECC for 30 days</u>	<u>January 5, 2012</u>
<u>25. Posting 5 at NERC for 45 days</u>	<u>January 6, 2012</u>
<u>26. Posting 5 WECC closes</u>	<u>February 6, 2012</u>
<u>27. Posting 5 NERC closes</u>	<u>February 20, 2012</u>
<u>28. Team meets to decide whether to forward to OC</u>	<u>February 23, 2012</u>
<u>29. Notice to OC for March agenda</u>	<u>February 24, 2012</u>
<u>30. Operating Committee approval</u>	<u>March 27, 2012</u>

WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version ~~4~~5

Open: ~~November 15, 2011~~January 5, 2012 WECC Closed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC Closed: February 20, 2012

**Version History** – Shows Approval History and Summary of Changes in the Action Field

Version	Date	Action	Change Tracking
1	January 17, 2011	Draft Version of Permanent Replacement Standard for  BAL-STD-002-0	Version 1 posted 1/17/2011 through 3/3/2011.
1	March 11, 2011	“Purpose” adjusted, reserve restoration window adjusted, calculation moved to the Measures	Version 2 posted 3/11-2011 through 4/11/2011.
1	September 19, 2011	Post-OC rejection	Version 3 posted 9/19/2011 through <del>October 10/19,</del> /2011.
<u>1</u>	<u>November 15, 2011</u>	<u>Structure changed for clarity, added Applicable Entities earlier omitted</u>	<u>Version 4 posted 11/15/2011 through 12/15/2011.</u>
<u>1</u>	<u>January 5, 2012</u>	<u>Structure changed for clarity, added Applicable Entities earlier omitted, responded to technical conference, comments and NERC quality review</u>	<u>Version 5 posted 1/5/2012 through 2/6/2012</u>



Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

~~Open: January 6, 2012 NERC~~ Closed: February 20, 2012

~~below. f:~~ Violation Risk Factor: ~~Medium~~High] [Time Horizon: Real-time operations]

~~1.1~~ ~~Minimum Reserve Amount~~ ~~\_\_\_\_\_~~ The greater of either:

- ~~A~~The amount of Contingency Reserve equal to the loss of the most severe single contingency; ~~or~~
- ~~A~~The amount of Contingency Reserve equal to the sum of three percent of hourly integrated Load plus three percent of hourly integrated generation.

~~1.2~~ ~~Reserve Types~~

~~1.2~~ Comprised of any combination of the reserve types specified below:

- Operating Reserve – Spinning
- Operating Reserve - Supplemental
- Interchange Transactions designated by the ~~source~~Source Balancing Authority as Operating Reserve – Supplemental
- Reserve held by other entities by agreement that is deliverable on Firm Transmission Service-
- A resource, other than generation or load, that can ~~be deployed within ten minutes~~ provide energy or reduce energy consumption
- Load, including ~~Demand~~demand response resources, Demand-Side Management resources, Direct Control Load Management, Interruptible Load or Interruptible Demand, or any other Load made available for curtailment by the Balancing Authority or the Reserve Sharing Group via contract or agreement.
- All other ~~Load~~load, not identified above, once the Reliability Coordinator has declared an ~~Energy Emergency Alert~~ energy emergency alert signifying that firm load interruption is imminent or in progress.

~~1.3~~ Based on real-time hourly load and generating energy values averaged over each Clock Hour (excluding Qualifying Facilities covered in 18 C.F.R. § 292.101, as addressed in FERC Order 464).

- ~~1.4~~ An amount of capacity from a resource that is deployable within ten minutes.

~~M1.~~ ~~Evidence of compliance with Requirement 1 may include, but is not limited to,~~  
Each Balancing Authority and each Reserve Sharing Group will have  
documentation ~~that the reserves~~demonstrating its Contingency Reserve was

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

~~maintained to comply with Requirement 1, Section 1.1 are fully deployable within 10 minutes of notification.~~

### ~~M1. Section 1.1~~

~~Evidence of compliance with Requirement 1, Section 1.1 may include, but is not limited to, documentation that reserves were maintained in an amount that is the greater of the two amounts specified in Requirement 1, Section 1.1, based upon data averaged over each clock hour, except within the first 60sixty minutes following an event requiring the activation of Contingency Reserves. [Violation Risk Factor: Medium] [Time Horizon: Real-time operations] Reserve.~~

#### Part 1.1

Each Balancing Authority and each Reserve Sharing Group will have dated documentation that demonstrates its Contingency Reserve was maintained in accordance with the amounts identified in Requirement R1, Part 1.1, except within the first sixty minutes following an event requiring the activation of Contingency Reserve.

*Attachment A is a practical illustration showing how the generation amount is may be calculated under Requirement R1.*

- ~~For purposes of~~Where Dynamic Schedules are used as part of the generation amount upon which Contingency Reserve is predicated, additional evidence of compliance with Requirement ~~4, Section~~R1, Part 1.1 may include, but is not limited to, documentation showing a reciprocal acknowledgement as to which entity is carrying the reserves. This transfer may be all or some portion of the physical generator and is not limited to the entire physical capability of the generator. *[Violation Risk Factor: Medium] [Time Horizon: Real-time operations]*
- ~~For purposes of~~Where Pseudo-Ties are used as part of the generation amount upon which Contingency Reserve is predicated, additional evidence of compliance with Requirement ~~4, Section~~R1, Part 1.1, may include, but is not limited to, documentation accounting for the ~~transfer~~transfers included in the Pseudo-~~tie~~. *[Violation Risk Factor: Medium] [Time Horizon: Real-time operations]*Ties.

### ~~M1. Section~~Part 1.2

~~Evidence of~~Each Balancing Authority and each Reserve Sharing Group will have dated documentation that demonstrates compliance with Requirement ~~4, Section~~R1,

Open: ~~November 15, 2011~~January 5, 2012 WECClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC      Closed: February 20, 2012

Part 1.2. Evidence may include, but is not limited to documentation that reserves were comprised of the types listed in Requirement ~~4~~, ~~Section R1, Part~~ 1.2 for purposes of meeting the Contingency Reserve obligation of Requirement ~~4~~. ~~[Violation Risk Factor: Medium] [Time Horizon: Real-time operations]~~R1. Additionally, for purposes of the last bullet of Requirement R1, Part 1.2, evidence of compliance may include, but is not limited to, documentation that the reliability coordinator had issued an energy emergency alert, indicating that firm Load interruption was imminent or was in progress.

### Part 1.3

Each Balancing Authority and each Reserve Sharing Group will have dated documentation that demonstrates compliance with Requirement R1, Part 1.3. Evidence of compliance with Requirement R1, Part 1.3 may include, but is not limited to documentation that Contingency Reserve amounts are based upon load and generating data averaged over each Clock Hour and excludes Qualifying Facilities covered in 18 C.F.R. § 292.101, as addressed in FERC Order 464.

### Part 1.4

Evidence of compliance with Requirement R1, Part 1.4 may include, but is not limited to, documentation that the reserves maintained to comply with Requirement R1, Part 1.4 are fully deployable within ten minutes.

**R2.** Each Balancing Authority and each Reserve Sharing Group shall maintain at least half of its minimum amount of Contingency Reserve identified in Requirement R1, as Operating Reserve – Spinning that meets both of the following reserve characteristics. [Violation Risk Factor: High] [Time Horizon: Real-time operations]

2.1 Reserve that is immediately and automatically responsive to frequency deviations through the action of a governor or other control system;

2.2 Reserve that is capable of fully responding within ten minutes.

**M2.** Each Balancing Authority and each Reserve Sharing Group will have dated documentation that demonstrates it maintained at least half of the Contingency Reserve identified in Requirement R1 as Operating Reserve – Spinning, averaged over each Clock Hour, that met both of the reserve characteristics identified in Requirement R2, Part 2.1 and Requirement R2, Part 2.2.

**R3.** Each Sink Balancing Authority shall carry and each sink Reserve Sharing Group shall maintain an amount of Operating Reserve, in addition to the minimum ~~reserve amount identified~~Contingency Reserve in Requirement ~~4 above~~R1, equal to the amount of Operating Reserve ~~—~~Supplemental for any Interchange Transaction

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

designated as part of the Source Balancing Authority's Operating Reserve—  
Supplemental—or source Reserve Sharing Group's Operating Reserve—  
Supplemental, except within the first sixty minutes following an event requiring the  
activation of Contingency Reserve. [Violation Risk Factor: *MediumHigh*] [Time  
Horizon: *Real-time operations*]

~~M2.~~ ~~Evidence of compliance with Requirement 2 may include, but is not limited to,~~  
~~documentation that each~~ **M3.** Each Sink Balancing Authority and each sink  
Reserve Sharing Group will have dated documentation demonstrating it maintained  
additional reserves in an amount that is an amount of Operating Reserve, in addition  
to the Contingency Reserve identified in Requirement R1, equal to the amount of  
Operating Reserve—Supplemental for any Interchange Transaction designated as  
part of the Source Balancing Authority's Operating Reserve—Supplemental or  
greater than that specified in Requirement 2, based upon data averaged over each  
clock hoursource Reserve Sharing Group's Operating Reserve—Supplemental, for  
the entire period of the transaction, except within the first ~~60~~sixty minutes following  
an event requiring the activation of Contingency Reserves—, in accordance with  
Requirement 3.

**R3R4.** Each Source Balancing Authority and each source Reserve Sharing Group  
shall ~~carry~~maintain an amount of Operating Reserve, in addition to the minimum  
~~reserve amount~~Contingency Reserve amounts identified in Requirement ~~1~~above**R1**,  
equal to the amount and type of Operating Reserves for any Operating Reserve  
transactions for which it is the Source Balancing Authority: or source Reserve  
Sharing Group. [Violation Risk Factor: *MediumHigh*] [Time Horizon: *Real-time*  
*operations*]

~~M3.~~ ~~Evidence of compliance with Requirement 3 may include, but is not limited to,~~  
~~documentation that each~~ **M4.** Each Source Balancing Authority and each source  
Reserve Sharing Group will have dated documentation that demonstrates it  
maintained an amount of additional reserves in an amount that is equal to or greater  
than that specified in Requirement 2, based upon data averaged over each clock  
hour, except within the first 60 minutes following an event requiring the activation of  
ContingencyOperating Reserves.

~~R4.~~ Each Balancing Authority that is not a member of a Reserve Sharing Group and each  
Reserve Sharing Group shall maintain at least half of the Contingency Reserve  
identified in Requirement ~~1~~as Operating Reserve—Spinning that meets both of the  
following reserve characteristics: [Violation Risk Factor: *High*] [Time Horizon: *Real-*  
*time operations*]

~~4.1~~ Reserve that is immediately**R1**, greater than or equal to the amount and  
automatically responsive to frequency deviations through the action of a  
governor or other control system,



WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version ~~4~~5

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC      Closed: February 20, 2012

~~4.2~~ Reserve that is capable of fully responding within ten minutes.

~~M4.~~ Evidence of compliance with Requirement 4 may include, but is not limited to, documentation that each Balancing Authority that is not a member of a Reserve Sharing Group and each Reserve Sharing Group maintained at least half of the Contingency Reserve, type of that identified in Requirement 1, as Operating Reserve – Spinning that meets both of the reserve characteristics specified in Requirement 4, Part 4.1 and Part 4.2. 4, for the entire period of the transaction.

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC Closed: February 20, 2012

## C. Compliance

### 1. Compliance Monitoring Process

#### ~~1.1 Compliance Monitoring Responsibility~~

#### 1.1 Compliance Enforcement Authority

For entities that do not work for the Regional Entity, the Regional Entity shall serve as the Compliance Enforcement Authority.

For Reliability Coordinators and other functional entities that work for their Regional Entity, the ERO or a Regional Entity approved by the ERO and FERC or other applicable governmental authorities shall serve as the Compliance Enforcement Authority.

For responsible entities that are also Regional Entities, the ERO or a Regional Entity approved by the ERO and FERC or other applicable governmental authorities shall serve as the Compliance Enforcement Authority.

#### 1.2 Compliance Monitoring ~~Period~~and Assessment Processes:

~~The~~Compliance Audit

Self-Certification

Spot Checking

Compliance Investigation

Self-Reporting

Complaint

#### 1.3 Evidence Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may use one or more of the following methods to assess compliance: ask an entity to provide other evidence to show that it was compliant for the full time period since the

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

last audit.

- ~~• Spot check audits conducted anytime with 30 days notice given to prepare~~  
~~Periodic audit as scheduled by the Compliance Enforcement Authority~~  
~~Investigations.~~
- ~~• Other methods as provided for in the Compliance Monitoring Enforcement Program.~~

~~1.2.1 Compliance Monitoring Period: one clock hour.~~

### ~~1.3~~ **Data Retention**

~~Each Balancing Authority and each~~ Reserve Sharing Groups and Balancing AuthoritiesGroup shall keep evidence for ~~Measure M1~~Requirement R1 through M4R4 for three years plus calendar current, ~~or since the last audit, whichever is longer.~~

### **1.4. Additional Compliance Information**

**1.4.1.** This Standard shall apply to each Balancing Authority ~~that is not a member of a Reserve Sharing Group~~ and each Reserve Sharing Group that has registered with WECC as provided in Part 1.4.2 of Section ~~1.4.2 below~~C.

Each Balancing Authority identified in the registration with WECC as provided in Part 1.4.2 of Section ~~1.4.2 below~~C shall be responsible for compliance with this Standard through its participation in the Reserve Sharing Group and not on an individual basis.

**1.4.2.** A Reserve Sharing Group may register as the Responsible Entity for purposes of compliance with this Standard by providing written notice to the WECC: 1) indicating that the Reserve Sharing Group is registering as the Responsible Entity for purposes of compliance with this Standard, 2) identifying each Balancing Authority that is a member of the Reserve Sharing Group, and 3) identifying the person or organization that will serve as agent on behalf of the Reserve Sharing Group for purposes of communications and data submissions related to or required by this Standard.

**1.4.3.** If an agent properly designated in accordance with Part 1.4.2 of Section ~~1.4.2C~~ identifies individual Balancing Authorities within the Reserve Sharing Group responsible for noncompliance at the time of data submission, together with the percentage of responsibility attributable to

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

each identified Balancing Authority, then, except as may otherwise be finally determined through a duly conducted review or appeal of the initial finding of noncompliance: 1) any penalties assessed for noncompliance by the Reserve Sharing Group shall be allocated to the individual Balancing Authorities identified in the applicable data submission in proportion to their respective percentages of responsibility as specified in the data submission, 2) each Balancing Authority shall be solely responsible for all penalties allocated to it according to its percentage of responsibility as provided in subsection 1) of this [Part 1.4.3 of Section 1.4.3C](#), and 3) neither the Reserve Sharing Group nor any member of the Reserve Sharing Group shall be responsible for any portion of a penalty assessed against another member of the Reserve Sharing Group in accordance with subsection 1) of this [Part 1.4.3 of Section 1.4.3C](#) (even if the member of Reserve Sharing Group against which the penalty is assessed is not subject to or otherwise fails to pay its allocated share of the penalty).

- 1.4.4.** If an agent properly designated in accordance with [Part 1.4.2 of Section 1.4.2C](#) fails to identify individual Balancing Authorities within the Reserve Sharing Group responsible for noncompliance at the time of data submission or fails to specify percentages of responsibility attributable to each identified Balancing Authority, any penalties for noncompliance shall be assessed against the agent on behalf of the Reserve Sharing Group, and it shall be the responsibility of the members of the Reserve Sharing Group to allocate responsibility for such noncompliance.
- 1.4.5.** Any Balancing Authority that is a member of a Reserve Sharing Group that has failed to register as provided in [Part 1.4.2 of Section 1.4.2C](#) shall be subject to this Standard on an individual basis.

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC Closed: February 20, 2012

**Table of Compliance Elements**

R	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Real-time Operations	<del>High</del> Medium	<del>There shall be a Lower Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one Clock Hour, during a calendar month, in which Contingency Reserve is less than 100% but greater than or equal to 90% of the required Contingency Reserve, with the characteristics specified in Requirement R1.	<del>There shall be a Moderate Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one Clock Hour, during a calendar month, in which Contingency Reserve is less than 90% but greater than or equal to 80% of the required Contingency Reserve, with the characteristics specified in Requirement R1.	<del>There shall be a High Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one Clock Hour, during a calendar month, in which Contingency Reserve is less than 80% but greater than or equal to 70% of the required Contingency Reserve, with the characteristics specified in Requirement R1.	<del>There shall be a Severe Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one Clock Hour, during a calendar month, in which Contingency Reserve is less than 70% of the required Contingency Reserve, with the characteristics specified in Requirement R1.
R2	Real-time Operations	MediumHigh	<del>There shall be a Lower Level of non-compliance</del>	<del>There shall be a Moderate Level of non-</del>	<del>There shall be a High Level of non-compliance</del>	<del>There shall be a Severe Level of non-compliance if</del>

Open: ~~November 15, 2011~~January 5, 2012 WECClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

R	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
			<p><del>if there is one hour during a calendar month in which the</del>The Balancing Authority or the Reserve Sharing <del>Group's Group</del> that incurs one <u>Clock Hour</u>, during a <u>calendar month</u>, in which Contingency Reserve <u>Operating Reserve - Spinning</u> is less than 100% but greater than or equal to 90% of the required <del>Contingency Reserve</del><u>Operating Reserve - Spinning</u> amount specified in <u>Requirement R2</u>, and both <u>characteristics</u> were met.</p>	<p><del>compliance if there is one hour during a calendar month in which the</del>The Balancing Authority or the Reserve Sharing <del>Group's Group</del> that incurs one <u>Clock Hour</u>, during a <u>calendar month</u>, in which Contingency Reserve <u>Operating Reserve - Spinning</u> is less than 90% but greater than or equal to 80% of the required <del>Contingency Reserve</del><u>Operating Reserve - Spinning</u> amount specified in <u>Requirement R2</u>, and both <u>characteristics</u> were met.</p>	<p><del>if there is one hour during a calendar month in which the</del>The Balancing Authority or the Reserve Sharing <del>Group's Group</del> that incurs one <u>Clock Hour</u>, during a <u>calendar month</u>, in which Contingency Reserve <u>Operating Reserve - Spinning</u> is less than 80% but greater than or equal to 70% of the required <del>Contingency Reserve</del><u>Operating Reserve - Spinning</u> amount specified in <u>Requirement R2</u>, and both <u>characteristics</u> were met.</p>	<p><del>there is one hour during a calendar month in which the</del>The Balancing Authority or the Reserve Sharing <del>Group's Group</del> that incurs one <u>Clock Hour</u>, during a <u>calendar month</u>, in which Contingency Reserve <u>Operating Reserve - Spinning</u> is less than 70% of the required <del>Contingency Reserve</del><u>Operating Reserve - Spinning</u> amount specified in <u>Requirement R2</u>, and both <u>characteristics</u> were met.</p>
R3	Real-time Operations	Medium High	There shall be a Lower Level of non-compliance if there is one	There shall be a Moderate Level of non-compliance if	There shall be a High Level of non-compliance if there is one	There shall be a Severe Level of non-compliance if there is one hour during a calendar

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

R	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
			<del>hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one hour, during a calendar month, in which Contingency Reserve is less than 100% but greater than or equal to 90% of the required Contingency Operating Reserve amount specified in Requirement R3.	<del>there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one hour, during a calendar month, in which Contingency Reserve is less than 90% but greater than or equal to 80% of the required Contingency Operating Reserve amount specified in Requirement R3.	<del>hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one hour, during a calendar month, in which Contingency Reserve is less than 80% but greater than or equal to 70% of the required Contingency Operating Reserve amount specified in Requirement R3.	<del>month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one hour, during a calendar month, in which Contingency Reserve is less than 70% of the required Contingency Operating Reserve amount specified in Requirement R3.
R4	Real-time Operations	High	<del>There shall be a Lower Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that incurs one hour, during a	<del>There shall be a Moderate Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that	<del>There shall be a The High Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group	<del>There shall be a Severe Level of non-compliance if there is one hour during a calendar month in which the</del> The Balancing Authority or the Reserve Sharing Group's Group that

Open: ~~November 15, 2011~~January 5, 2012 WECClosed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC Closed: February 20, 2012

R	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
			<u>calendar month, in which Contingency Reserve Operating Reserve – Spinning</u> is less than 100% but greater than or equal to 90% of the required Operating Reserve – <u>Spinning</u> ; <u>amount specified in Requirement R4.</u>	<u>incurs one hour, during a calendar month, in which Contingency Reserve Operating Reserve – Spinning</u> is less than 90% but greater than or equal to 80% of the required Operating Reserve – <u>Spinning</u> <u>amount specified in Requirement R4.</u>	<u>that incurs one hour, during a calendar month, in which Contingency Reserve Operating Reserve – Spinning</u> is less than 80% but greater than or equal to 70% of the required Operating Reserve – <u>Spinning</u> ; <u>amount specified in Requirement R4.</u>	<u>incurs one hour, during a calendar month, in which Contingency Reserve Operating Reserve – Spinning</u> is less than 70% of the required Operating Reserve – <u>Spinning</u> ; <u>amount specified in Requirement R4.</u>

**D. Regional Variances**

None.

**E. Interpretations**

None.

**F. Associated Documents**

None.



Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC Closed: February 20, 2012

**Attachment A**

Attachment A is illustrative only; it is not a requirement. Requirement R1 calls for an amount of Contingency Reserve to be maintained, predicated on an amount of generation and load required in Requirement R1, Part 1.1., specifically:

“1.1 The greater of either:

- The amount of Contingency Reserve equal to the loss of the most severe single contingency;
- The amount of Contingency Reserve equal to the sum of three percent of hourly integrated Load plus three percent of hourly integrated generation.”

Attachment A illustrates one possible way to account for and calculate the amount of generation upon which the Contingency Reserve amount is predicated.

Below is a practical illustration showing how the generation amount is may be calculated under ~~R4~~Requirement R1 for Balancing Authorities (BA) and Reserve Sharing Groups (RSG).

**BA1 Online / RSG 1**  
**Generation Part of Gen for BAL-002Generator**

Generator 1	300 MWs online	Yes
Generator 2	200 MWs online	Yes
Generator 3 (Pseudo-Tied out to BA2)	100 MWs online	No
Generator 4 QF (has <del>Backup Contract</del> <u>backup contract</u> )	10 MWs online	No
Generator 5 QF in EMS	10 MWs online	Yes
Generator 6	0 MWs online	Yes

Dynamic Schedule to BA2 (100 from BA1<sup>1</sup> (50 MWs)  
Reduces Gen)

Generation On Line 620 MWs (The sum of gen 1-6)  
 BA Generation generation (EMS) 510 MWs (The  
sum of gen 1, 2, and 5)  
 Generation to use Under BAL-002 410-WECC-1460 MWs\*\* (The  
sum of gen 1, 2 and 5 minus  
Dynamic Schedule)

<sup>1</sup> Note: This Dynamic Schedule is not the same as the Generator 3 Pseudo-Tie.

WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version ~~4~~5

Open: ~~November 15, 2011~~January 5, 2012 WECC Closed: ~~December 15, 2011~~February 6, 2012

Open: January 6, 2012 NERC      Closed: February 20, 2012

\*\* Assumes BA1 and BA2 agree on Dynamic ~~Transfer~~Schedule treatment. If no agreement, BA1 would ~~have to carry~~maintain reserves based on 510 MWs Generation.

**BA2**

<b>BA2 / RSG2</b>	<b>Generation</b>	<b>Part of Generator</b>
Generator 11	100 MWs	Yes
Generator 12	100 MWs	Yes
Generator 3 (Pseudo-Tied <u>in</u> from BA1)	100 MWs	Yes
<u>Dynamic Schedule from BA1</u> <u>Yes</u>	<u>100 to BA2</u>	<u>50 MWs</u>

~~BA~~

Generation <del>(EMS)</del>	300 MWs	<u>(The sum of gen 11, 12 and 3.)</u>
<u>Total BA generation (EMS)</u>	300 MWs	<u>(The sum of gen 11, 12 and 3)</u>
Generation <u>to use</u> Under BAL-002	<del>400 MWs</del> <u>** WECC-1 350 MWs</u> <u>**</u>	<u>(The sum of gen 11, 12 and 3 plus Dynamic Schedule)</u>

\*\* Assumes BA1 and BA2 agree on Dynamic ~~Transfer~~Schedule treatment. If no agreement, BA1 would have to ~~carry~~maintain reserves based on 510MWs Generation and BA2 would determine its generation to be 300 MWs.

WECC Standard BAL-002-WECC-1  
Contingency ~~Reserves~~Reserve  
Version ~~4~~5

Open: ~~November 15, 2011~~January 5, 2012 WECCClosed: ~~December 15, 2011~~February 6, 2012  
Open: January 6, 2012 NERC      Closed: February 20, 2012

## Guideline and Technical Basis

### ~~Purpose Statement~~

A Guidance Document addressing implementation of this standard has been filed with this standard.