

Prerequisite Approvals and Activities

There are no other reliability standards or Standard Authorization Requests (SARs), in progress or approved, that must be implemented before this set of Balance Resources and Demand standards can be implemented.

As part of this implementation plan, the drafting team is recommending that some ~~Version 0 Balance Resources and Demand~~ already approved requirements be retired or revised because they will be ~~displaced~~ replaced or need to be updated to conform to ~~with~~ Version 1 Balance Resources and Demand requirements.

Balloting

~~The drafting team recommends that this set of standards be balloted with a single ballot so that only one Ballot Pool will be formed.~~

Effective Dates

The following table shows the proposed effective dates for the Version 1 Balance Resources and Demand standards. The effective dates shown below are contingent on the approval of the reliability standards by a vote of the Ballot Pool that is scheduled for ~~March, 2007~~ October 2006. The effective dates ~~is~~ are also contingent on adoption and ~~adoption approval~~ of these Standards by the NERC Board of Trustees and applicable regulatory entities. ~~The board will approve the final effective date when it adopts the standards for implementation.~~ These standards are scheduled for consideration by the board on May 2, 2007. ~~November 1, 2006~~. Note that the effective dates were revised because the compliance staff requested that drafting teams begin selecting effective dates that begin on the first day of a calendar year's quarter. The proposed effective dates allow time for applicable regulatory approvals following Board of Trustee adoption.

Version 1 Standard	Proposed Effective Date for Eastern Interconnection and ERCOT	Reason for Delay in Implementation	Proposed Effective Date for WECC and Hydro- <u>Québec</u> ¹
BAL-007 Balance of Resources and Demand	<u>1st day of 1st quarter, 6 months after applicable regulatory approvals</u> October 1, 2007	Entities that didn't participate in the field test need to update system operator tools so that system operators can monitor BAALs and Frequency Limits.	<u>1st day of 1st quarter, 12 months after applicable regulatory approvals</u> April 1, 2008
BAL-008 Frequency and Area Control Error	<u>1st day of 1st quarter, 6 months after applicable regulatory approvals</u> October 1, 2007	Entities that didn't participate in the field test need to update system operator tools so that system operators can monitor BAALs and Frequency Limits.	<u>1st day of 1st quarter, 12 months after applicable regulatory approvals</u> April 1, 2008
BAL-009	<u>1st day of 1st quarter,</u>	Entities that didn't participate in	<u>1st day of 1st</u>

¹ This assumes that Hydro-Quebec is recognized by the ERO as an Interconnection before the standards become effective.

Actions to Return Frequency to within Frequency Trigger Limits	<u>6 months after applicable regulatory approvals October 1, 2007</u>	the field test need to update system operator tools so that system operators can monitor BAALs and Frequency Limits.	<u>quarter, 12 months after applicable regulatory approvals April 1, 2008</u>
BAL-010 Frequency Bias Settings	<u>1st day of 1st quarter, 3 months after applicable regulatory approvals April 1, 2007</u>	Time needed for entities to update their frequency bias settings.	<u>1st day of 1st quarter, 9 months after applicable regulatory approvals October 1, 2007</u>
BAL-011 Frequency Limits	<u>1st day of 1st quarter after applicable regulatory approvals January 1, 2007</u>	Limits have already been established for each Interconnection <u>that was identified when the standard was developed.</u>	<u>1st day of 1st quarter 6 months after applicable regulatory approvals July 1, 2007</u>

Delayed Effective Dates for WECC and Hydro-~~Quebec~~ Québec Interconnections

WECC and Hydro-~~Quebec~~ Québec did not participate in the field test. WECC expressed interest in the field test but could not get approval to waive compliance to CPS2 under the WECC Reliability Management System program. ~~Hydro-Quebec~~ Québec was not a recognized interconnection when the field test was started, and did not identify itself as an interconnection or express any interest in participating in the field test until the last comment period provided for development of the standards. To ensure that the limits developed for these interconnections work as intended, the drafting team recommends that members of WECC and Hydro-~~Quebec~~ Québec have a six-month field test to operate under the proposed standards, with any adjustments needed to the interconnection-wide frequency limits made during the field test period.

~~**Delayed Retirement of BAL-002 – Disturbance Control Standard**~~

~~The drafting team is recommending that BAL-002 be retired 18 months beyond the date that BAL-007 and BAL-008 become effective—or 27 months beyond the date of BOT adoption.~~

~~While stakeholder comments overwhelmingly support the proposed set of Balance Resources and Demand standards, stakeholders also voiced a level of discomfort with an immediate transition from the current Version 0 control standards to the new consensus control standards. The 18-month extension of the DCS standard is meant to provide a transitional safety net. Although the SDT and the commenters find no technical rationale for retaining DCS, the SDT does find the following benefits with a phased-in transition:~~

- ~~▪ Time to observe full implementation of operation to the new frequency limits over multiple seasons; including the time for the industry to implement any new processes for control and to gain experience with those new processes (some commenters noted that without full participation the field test is not totally conclusive)~~

- ~~Time for appropriate NERC committees to monitor the system interactions and integration with other standards (some commenters noted concern that other standards may not provide the level of support the current Version 0 standard provides)~~
- ~~Time to process a standard to retain DCS if real-time operations indicate DCS is still needed.~~

Implementation Plan for Balance Resources and Demands Standards (BAL-007 through BAL-011)

Version 0 <u>Approved</u> Standard	Proposed Effective Date
BAL-001- <u>0</u> Real Power Balancing Control Performance	Retire when compliance with BAL-007- <u>1</u> becomes effective
BAL-002 Disturbance Control Performance	Retire 18 months after the effective date for BAL-007 through BAL-009.
BAL-003- <u>0</u> Frequency Response and Bias	Retire when compliance with BAL-010- <u>1</u> becomes effective
BAL-005- <u>0</u> Automatic Generation Control <ul style="list-style-type: none"> ▪ <u>Compliance Monitoring Responsibility 1.1.1</u> 	1st set of modifications effective when When BAL-007- <u>1</u> through BAL-009- <u>1</u> become effective 2nd set of modifications become effective when BAL-002 is retired.
EOP-002- <u>2</u> Capacity and Energy Emergencies <ul style="list-style-type: none"> ▪ EOP-002-2 R5 (EOP-002-0 R6) ▪ EOP-002-2 R6 (EOP-002-0 R7) 	1st set of modifications become effective w When BAL-007- <u>1</u> through BAL-009- <u>1</u> become effective; 2nd set of modifications become effective when BAL-002 is retired.
IRO-005- <u>2</u> Reliability Coordination — Current Day Operations <ul style="list-style-type: none"> ▪ <u>R4, 8, 9, 11</u> 	1st set of modifications become effective w When BAL-007- <u>1</u> through BAL-009- <u>1</u> become effective; 2nd set of modifications become effective when BAL-002 is retired.

Compliance with Balance Resources and Demand Standards

Once the Version 1 Balance Resources and Demand ~~Standards~~ standards are effective, the responsible entities identified in each of the standards must comply with the requirements in that standard in accordance with the effective dates. The following maps the Balance Resources and Demand requirements to each applicable function. Note that some of the standards in this set are ~~revisions to already~~ Version 0 ~~approved~~ standards. Entities must continue to comply with all requirements in approved ~~Version 0 Standards~~ standards until the requirements in the approved ~~Version 0 Standards~~ standards are replaced or retired.

For example, BAL-001-0 should be retired when BAL-007-1 becomes effective. BAL-001-0 has requirements for Balancing Authorities. The Balancing Authority is responsible for compliance with all requirements in BAL-001-0 until the requirements in BAL-007-1 becomes effective.

Earlier Compliance Allowed

Following the approval of the Board of Trustees and prior to the effective date, any Balancing Authority; that has the agreement of its Reliability Coordinator and the approval of its

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| Compliance Monitor^r may begin operating under the Version 1 Balance Resources and Demand standards.

Recommended Modifications to Version 0 Standards

The following table shows the Balance Resources and Demand Standard Drafting Team’s recommendations for modifying or deleting some ~~of the following Version 0 Balance Resources and Demand already approved~~ standards ~~or requirements~~. Justification for these recommendations is provided in the table. Redline versions showing the proposed changes to BAL-005, ~~EOP-002~~, and IRO-005 have been posted.

Version 0 Approved Standard	Recommendation	Reason
BAL-001-0 — Real Power Balancing Control Performance	Retire entire standard	BAL-001 requires compliance with CPS1 and CPS2; CPS1 is addressed in the new BAL-007; CPS2 is being retired based on stakeholder consensus
BAL-002 – Disturbance Control Performance	Retire entire standard	DCS is being retired based on stakeholder consensus.
BAL-003-0 ← Frequency Response and Bias	Retire entire standard	BAL-003 requires calculation of frequency bias, but the requirements aren't as objective as desired; BAL-010 contains more objective requirements for the calculation of frequency bias.
BAL-005-0 — Automatic Generation Control	Revise standard to remove references to CPS DCS	BAL-005 contains a reference to CPS – the compliance monitoring section was update to change the reference to CPM. BAL-005 contains some language in the compliance elements that requires Balancing Authorities to keep or provide data from DCS calculations. Since the requirement to calculate and report DCS is being retired, these data retention requirements should also be retired.
EOP-002-2 — Capacity and Energy Emergencies	Revise standard to replace references to CPS and eliminate references to DCS	DCS should be retired 18 months after BAL-007 and BAL-008 become effective. EOP-002 contains a reference to DCS and CPS – the requirement was updated to retain the intent while updating the reference to either CPM or BAAL.

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<p>IRO-005-1 — Reliability Coordination — Current Day Operations</p>	<p>Revise standard to replace references to CPS and eliminate references to DCS</p>	<p>IRO-005 contains some references to DCS andCPS — the requirements have been updated to retain the intent of each requirement while updating the reference to either CPM or BAAL.</p>
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Functions That Must Comply with the Proposed Standards

Standard	Functions That Must Comply With the Requirements
BAL-007-1 Balance of Resources and Demand	Balancing Authority (All requirements)
BAL-008-1 Frequency and Area Control Error	Reliability Coordinator (All requirements)
BAL-009-1 Actions to Return Frequency to within Frequency Trigger Limits	Balancing Authority (All requirements)
BAL-010-1 Frequency Bias Settings	Balancing Authority (All requirements)
BAL-011-1 Frequency Limits	NERC (All requirements)