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Standard Authorization Request Form

Title of Proposed Standard	BAL-005-1, Area Control Error Equation Implementation
Request Date	March 15, 2006

SAR Requestor Information		SAR Type <i>(Check a box for each one that applies.)</i>	
Name	NERC Resources Subcommittee	<input type="checkbox"/>	New Standard
Primary Contact	Raymond Vice, RS Frequency Task Force Chairman	<input checked="" type="checkbox"/>	Revision to existing Standard
Telephone	(205) 257-6209	<input type="checkbox"/>	Withdrawal of existing Standard
Fax	(205) 257-6663		
E-mail	rlvice@southernco.com	<input type="checkbox"/>	Urgent Action

Purpose (Describe the purpose of the standard — what the standard will achieve in support of reliability.)

The Resources Subcommittee (RS) proposes revising BAL-005-0, Automatic Generation Control standard, to incorporate the following:

- * Change the title to more appropriately describe the standard: BAL-005-1, Area Control Error Equation Implementation
- * Expand the Purpose to more appropriately describe the standard scope
- * Clarify language throughout the standard
- * Add supplemental regulation service requirements
- * Add overlap regulation service requirements
- * Add Pseudo-Ties requirements
- * Add Dynamic Schedule requirements

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Industry Need (Provide a detailed statement justifying the need for the proposed standard, along with any supporting documentation.)

Since Supplemental Regulation Service, Overlap Regulation Service, Dynamic Schedules, and Pseudo-Ties requirements affect the Automatic Control Error (ACE) calculation and the Interconnection frequency, they are considered reliability requirements. The Resources Subcommittee recommends incorporating these requirements into this standard to maintain Interconnection frequency within a predefined frequency profile under all conditions.

Supporting Documentation: Standard BAL-005-0, Automatic Generation Control; Dynamic Transfer Reference Document, version 1.1, November 29, 2004; NAESB WEQ Area Control Error (ACE) Equation Special Cases Standards - WEQBPS-003-000: Copyright 1996-2005 NAESB, Reproduced with NAESB's Permission

Note: The SAR Drafting Team will work cooperatively with NAESB to revise this standard to assure it is developed in harmony with the NAESB business practices standard(s).

Brief Description (Describe the proposed standard in sufficient detail to clearly define the scope in a manner that can be easily understood by others.)

The proposed BAL-005-1, ACE Equation Implementation will:

- 1) Add new title and purpose to appropriately describe the standard
- 2) Clarify language
- 3) Add NAESB v0 ACE Equation Special Cases business practices - since they affect frequency and are considered reliability requirements - these special cases are Pseudo-Ties and Dynamic Schedules that affect the ACE equation and have reliability implications.
 - a. Add Supplemental Regulation Service requirements
 - b. Add Overlap Regulation Service requirements
 - c. Add Pseudo Ties requirements
 - d. Add Dynamic Schedule requirements

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Reliability Functions

The Standard will Apply to the Following Functions <i>(Check box for each one that applies.)</i>		
<input type="checkbox"/>	Reliability Authority	Ensures the reliability of the bulk transmission system within its Reliability Authority area. This is the highest Reliability Authority.
<input checked="" type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time.
<input type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules.
<input type="checkbox"/>	Planning Authority	Plans the Bulk Electric System.
<input checked="" type="checkbox"/>	Resource Planner	Develops a long-term (>one year) plan for the resource adequacy of specific loads within a Planning Authority area.
<input type="checkbox"/>	Transmission Planner	Develops a long-term (>one year) plan for the reliability of transmission systems within its portion of the Planning Authority area.
<input type="checkbox"/>	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
<input type="checkbox"/>	Transmission Owner	Owns transmission facilities.
<input checked="" type="checkbox"/>	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders.
<input type="checkbox"/>	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer.
<input type="checkbox"/>	Generator Owner	Owns and maintains generation unit(s).
<input checked="" type="checkbox"/>	Generator Operator	Operates generation unit(s) and performs the functions of supplying energy and Interconnected Operations Services.
<input type="checkbox"/>	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity, and all necessary Interconnected Operations Services as required.
<input type="checkbox"/>	Market Operator	Integrates energy, capacity, balancing, and transmission resources to achieve an economic, reliability-constrained dispatch.
<input checked="" type="checkbox"/>	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user.

Reliability and Market Interface Principles

Applicable Reliability Principles <i>(Check box for all that apply.)</i>	
<input checked="" type="checkbox"/>	1. Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input checked="" type="checkbox"/>	2. The frequency and voltage of interconnected bulk electric systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk electric systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk electric systems shall be developed, coordinated, maintained and implemented.
<input type="checkbox"/>	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk electric systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk electric systems shall be assessed, monitored and maintained on a wide area basis.
Does the proposed Standard comply with all of the following Market Interface Principles? <i>(Select 'yes' or 'no' from the drop-down box.)</i>	
1. The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy. Yes	
2. An Organization Standard shall not give any market participant an unfair competitive advantage. Yes	
3. An Organization Standard shall neither mandate nor prohibit any specific market structure. Yes	
4. An Organization Standard shall not preclude market solutions to achieving compliance with that Standard. Yes	
5. An Organization Standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes	

Related Standards

Standard No.	Explanation
BAL-005-0	This SAR revises this standard.

Related SARs

SAR ID	Explanation

Regional Differences

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	