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Standard Authorization Request Form

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| Title of Proposed Standard | BAL-004-1, Time Error Correction |
| Request Date | March 15, 2006 |

| SAR Requestor Information | | SAR Type (Check a box for each one that applies.) | |
|---------------------------|------------------------|---|---------------------------------|
| Name | Resources Subcommittee | <input type="checkbox"/> | New Standard |
| Primary Contact | Bart McManus | <input checked="" type="checkbox"/> | Revision to existing Standard |
| Telephone Fax | (360)418-2309 | <input type="checkbox"/> | Withdrawal of existing Standard |
| E-mail | bamcmanus@bpa.gov | <input type="checkbox"/> | Urgent Action |

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

The Resources Subcommittee proposes revising BAL-004-0, to incorporate manual and automatic time error correction reliability requirements and measures; add three terms to the NERC Glossary of Terms related to this proposed standard; and include a regional difference for the Eastern Interconnection Regional Reliability Organizations. Time Error Correction affect each interconnection's frequency profile which has serious reliability implications.

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

The Resources Subcommittee recommends these Time Error Correction reliability requirements under all conditions. Time Error Correction affect each interconnection's frequency profile which has serious reliability implications. Every NERC reliability standard calculation that uses scheduled frequency is affected by this standard. Automatic time error correction will drive Balancing Authorities to pay back their frequency deviations in a relatively prompt manner after the deviations occur (within a matter of hours).

Supporting Documentation: Standard BAL-004-0, Time Error Correction; NAESB WEO Manual Time Error Correction Standards - WEQBPS-004-000: 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-004-1, Time Error Correction, incorporates:

- 1) New Purpose to appropriately describe the standard's scope
- 2) Clarify language
- 3) Add NAESB v0 Manual Time Error Correction Standard business practices - Since the time error correction affects interconnection frequency the procedures are considered reliability requirements. The methodology to implement a time error correction is to off-set frequency from the normally scheduled 60.00 Hz. Manipulating the Interconnection frequency has serious reliability implications. Every NERC reliability standard calculation that uses scheduled frequency is affected by this standard. Note: The designation of On-Peak and Off-Peak time periods is still considered a business practice and remains in the NAESB v0 Manual Time Error Correction Standard.
- 4) Add automatic time error correction requirements and measures
- 5) Add manual time error correction requirements and measures
- 6) Add three new terms to the NERC Glossary of Terms
- 7) Include a regional difference for the Eastern Interconnection to not initiate a manual time error correction between 0400-1100 Central Prevailing Time.

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Reliability Functions

| The Standard will Apply to the Following Functions <i>(Check box for each one that applies.)</i> | | |
|---|-------------------------------|--|
| <input checked="" 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 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 | Owens transmission facilities. |
| <input 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 | Owens and maintains generation unit(s). |
| <input 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 type="checkbox"/> | Load-Serving Entity | Secures energy and transmission (and related generation services) to serve the end user. |

Reliability and Market Interface Principles

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|--|--|
| 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 checked="" 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-004-0 | This SAR revises this standard |
| NAESB WEQ Manual Time Error Correction Standards - WEOBPS-004-000 | The RS recommends including all of the identified NAESB standards into the BAL-004-1 Time Error Correction reliability standard because of the reliability implications, except the designation of the "On-Peak" and "Off-Peak" periods. |
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Related SARs

| SAR ID | Explanation |
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Regional Differences

| Region | Explanation |
|---------------|---|
| ERCOT | |
| FRCC | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |
| MRO | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |
| NPCC | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |
| SERC | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |
| RFC | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |

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|------|---|
| SPP | Eastern Interconnection shall not initiate manual time error correction for fast-time between 0400-1100 Central Prevailing Time |
| WECC | |