**Standard Authorization Request Form**

**Regional Standard or Variance**

**Texas Reliability Entity, Inc.**

##### E-mail completed form to rsm@texasre.org

Texas RE to Complete

SAR No:

**Title of Proposed Regional Standard**: BAL-001-TRE-2

**Request Date**: Click or tap here to enter text.

**SAR Requester Information**

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**Registered Entity**: ERCOT

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**SAR Type** (Check a box for each one that applies.)

[ ]  New Standard

[x]  Revision to Existing Standard

[ ]  Revision to the Standard Development Process

[ ]  Withdrawal of existing standard

[ ]  Variance to a NERC Reliability Standard

 Which one? Click or tap here to enter text.

[ ]  Urgent Action

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| Purpose (Describe what the standard action will achieve in support of bulk power system reliability.)This SAR serves two purposes:* Include a provision that Generation resources not intending to provide Operating Reserves may extend the resource’s Governor deadband to +/- 0.036 Hz upon approval from Balancing Authority (BA.)
* Clarify the role of the Generator Owner (GO), Compliance Enforcement Authority (CEA), and the BA as it pertains to the Compliance Monitoring Period and Reset Time Frame (Section C: 1.2) in regards to resetting the 12-month rolling average performance score.
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| Industry Need (Provide a justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard action.) ERCOT procures Operating Reserves from Generation resources for each operating hour to ensure sufficient capacity is available to respond to frequency excursions during unit trips. The minimum Operating Reserve quantity to be procured at ERCOT is determined to cover the risk for the instantaneous loss of 2750 MW (per NERC BAL-003 Resource Contingency Protection Criteria.) Under the current version of North American Electric Reliability Corporation (NERC) Reliability Standard BAL-001-TRE-2, all on-line generation resources are required to have their Governors in service and provide Frequency Response unless exempted by the Balancing Authority (ERCOT). However providing Frequency Response in this manner results in increased wear on mechanical parts and operations and maintenance (O & M) costs that are borne by the GO. Notably, these costs were frequently mentioned as a concern during the initial drafting phase of BAL-001-TRE.This SAR allows those generation resources not intending to provide Operating Reserves to widen the resource’s Governor deadband to +/-0.036 Hz.Texas Reliability Entity (Texas RE), as the Compliance Enforcement Authority (CEA) for the ERCOT region, is responsible for receiving and approving mitigation plans sent by the GOs. Once the mitigation plan is approved by Texas RE, the approval information shall be forwarded to ERCOT to initiate the resetting of the 12-month rolling average performance score. The proposed language in Section C: 1.2 clarifies the roles and responsibilities of the GO, Texas RE and ERCOT in this process. |
| **Brief Description** (Provide a paragraph that describes the scope of this standard action.) 1. Upon approval by the BA, any generating resource that do not intend to provide Operating Reserves may expand the resource’s Governor deadband to +/-0.036 Hz by providing a GO attestation stating that the unit does not intend to provide Operating Reserves and also updating the new deadband value in its Resource Registration data.
2. GOs may implement mitigation plan to increase Governor performance of a generation resource. Once the mitigation plan has been approved by Texas RE, the approval information shall be forwarded to ERCOT by the GO to initiate the resetting of 12-month rolling average performance score.
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| **Detailed Description** (Provide a description of the proposed project with sufficient details for the standard drafting team to execute the SAR.)Requirement 6 of BAL-001-TRE-2 standard requires GOs to set the Governor deadband of Steam and Hydro Turbines with Mechanical Governors at +/-0.034 Hz, and all other generating units/generating facilities with Governor deadbands at +/-0.017 Hz. This SAR proposes that upon approval by the BA, all generation resources falling under the deadband requirement of +/-0.017 Hz may widen the Governor deadband to +/-0.036 Hz by providing a GO attestation stating that the unit does not intend to provide Operating Reserves, as well as updating the new deadband value within its Resource Registration data with ERCOT. Studies on the impacts of extending the deadband to this +/-0.036 Hz tolerance have shown minimal impacts on the performance of the frequency control performance within ERCOT. Deadband settings for Steam and Hydro Turbines with Mechanical Governors will remain at +/-0.034 Hz, regardless of the resource’s intention to offer Operating Reserves.Any generation resources with a +/-0.036 Hz deadband intending to provide Operating Reserves to the ERCOT market will be required to successfully complete Governor testing identified in Section 8 of the Nodal Operating Guide prior to being allowed to provide Operating Reserves. Texas RE, as the CEA for the ERCOT region, is responsible for receiving and approving mitigation plans sent by GOs. Once the mitigation plan has been approved by Texas RE, GOs shall forward the approval information to ERCOT to initiate the resetting of the 12-month rolling average performance score. The proposed language in Section C: 1.2 will clarify the roles and responsibilities of the GOs, Texas RE and ERCOT in this process. |

## Reliability Functions

## For a more detailed description of the Reliability Functions, please refer to [NERC Function Model\_V5](http://www.nerc.com/pa/Stand/Functional%20Model%20Archive%201/Functional_Model_V5_Final_2009Dec1.pdf)

The Regional Standard will apply to the following functions: (Check all that apply.)

|  |  |
| --- | --- |
| [x]  Balancing Authority | [ ]  Resource Planner |
| [ ]  Distribution Provider | [ ]  Transmission Operator |
| [x]  Generator Operator | [ ]  Transmission Owner |
| [x]  Generator Owner | [ ]  Transmission Planner |
| [ ]  Planning Coordinator/Planning Authority | [ ]  Transmission Service Provider |
| [ ]  Reliability Coordinator |  |

## Reliability and Market Interface Principles

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| **Applicable Reliability Principles** (Check all that apply.) |
|[ ]  1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
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|[x]  1. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
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|[ ]  1. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
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|[ ]  1. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.
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|[ ]  1. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
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|[ ]  1. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
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|[ ]  1. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
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|[ ]  8. Bulk power systems shall be protected from malicious physical or cyber attacks. |
| Does the proposed Standard comply with all of the following Market Interface Principles?  |
| 1. A reliability standard shall not give any market participant an unfair competitive advantage.

[x]  Yes [ ]  No |
| 1. A reliability standard shall neither mandate nor prohibit any specific market structure.

[x]  Yes[ ]  No |
| 1. A reliability standard shall not preclude market solutions to achieving compliance with that standard.

[x]  Yes [ ]  No |
| 1. A reliability 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.

[x]  Yes [ ]  No |

**Related Standards**

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| Standard No. | Explanation |
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## Related SARs

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| SAR ID | Explanation |
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