

## Implementation Plan

### Project 2007-09 Generator Verification

#### Implementation Plan for MOD-026-1, Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions

##### *Approvals Required*

MOD-026-1, Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions

##### *Prerequisite Approvals*

None

##### *Revisions to Glossary Terms*

None

##### *Applicable Entities*

Generator Owner  
Transmission Planner

For the purpose of this standard, the following Facilities are considered, “applicable units.”

Units or plants that meet the following:

Generating units connected to the Eastern or Quebec Interconnections with the following characteristics:

- Individual generating unit greater than 100 MVA (gross nameplate rating) directly connected to the Bulk Electric System.
- Each generating plant consisting of multiple units that are directly connected to the Bulk Electric System at a common bus with total generation greater than 100 MVA (gross aggregate rating).

Generating units connected to the Western Interconnection with the following characteristics:

- Individual generating unit greater than 75 MVA (gross nameplate rating) directly connected to the Bulk Electric System.

- Each generating plant consisting of multiple units that are directly connected to the Bulk Electric System at a common bus with total generation greater than -75 MVA (gross aggregate rating).

Generating units connected to the ERCOT Interconnection with the following characteristics:

- Individual generating unit greater than 50 MVA (gross nameplate rating) directly connected to the Bulk Electric System.
- Each generating plant / Facility consisting of multiple units that are connected to the Bulk Electric System at a common bus with total generation greater than -75 MVA (gross aggregate rating).

For all Interconnections:

- Any technically justified<sup>1</sup> unit that meets NERC registry criteria and is requested by the Transmission Planner.

### ***Conforming Changes to Other Standards***

None

### ***Effective Dates***

In those jurisdictions where regulatory approval is required:

- Each responsible entity shall ensure compliance with Requirements R1, and R3 through R6 By the first day of the first calendar quarter following applicable regulatory approval, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.
- Each Generator Owner shall ensure at least 30 percent of its applicable unit gross MVA per Interconnection are compliant with Requirement R2 by the first day of the first calendar quarter, four years following applicable regulatory approval, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.
- Each Generator Owner shall ensure at least 50 percent of its applicable unit gross MVA per Interconnection are compliant with Requirement R2 by the first day of the first calendar quarter, six years following applicable regulatory approval, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.
- Each Generator Owner shall ensure 100 percent of its applicable unit gross MVA are compliant with Requirement R2 By the first day of the first calendar quarter, 10 years

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<sup>1</sup> Technical justification is achieved by demonstrating that the simulated unit or plant response does not match the measured unit or plant response.

following applicable regulatory approval, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

In those jurisdictions where no regulatory approval is required:

- Each responsible entity shall ensure compliance with Requirements R1, and R3 through R6 by the first day of the first calendar quarter following Board of Trustees adoption.
- Each Generator Owner shall ensure at least 30 percent of its applicable unit gross MVA per Interconnection is compliant with Requirement R2 by the first day of the first calendar quarter, four years following Board of Trustees adoption.
- Each Generator Owner shall ensure at least 50 percent of its applicable unit gross MVA per Interconnection is compliant with Requirement R2 By the first day of the first calendar quarter, six years following Board of Trustees adoption.
- Each Generator Owner shall ensure 100 percent of its applicable unit gross MVA is compliant with Requirement R2 By the first day of the first calendar quarter, 10 years following Board of Trustees adoption.

### ***Consideration for Early Compliance***

Existing excitation control system and plant volt/var control model verification is sufficient for demonstrating compliance for a 10 year period from the actual verification-transmittal date if either of the following applies:

- The Generator Owner has a verified model that is compliant with the applicable regional entity policies, guidelines or criteria existing at the time of model verification, or
- The Generator Owner has an existing verified model that is compliant with the requirements of this standard.

### **Justification**

This phased implementation supports the 10 year cycle for the collection of generator response data necessary for required verifications and typical generating unit outage schedules.

When a Generator Owner has verified its Excitation Control System and Plant Volt/Var Control model(s) in compliance with its regional entity requirements 10 years or less prior to the approval date of this Standard, these verifications are deemed sufficient for demonstrating compliance with this Standard for a ten year period from the date of the aforementioned verification-transmittal.

***Retirements***

None