PJM has issued this compliance bulletin in advance of the July 1, 2014 implementation of NERC MOD-026-1 and MOD-027-1 standards. This bulletin describes the process for a Generator Owner to update data specified in MOD-026-1 or MOD-027-1 if required.

Background
PJM is responsible for the development of a Regional Transmission Expansion Plan (RTEP) for the PJM system that will meet the needs of the region in a reliable, economic and environmentally acceptable manner. The annual RTEP includes a comprehensive review of PJM Bulk Electric System (BES) facilities as required by NERC standards TPL-001, TPL-002, TPL-003, and TPL-004. PJM maintains a series of power flow and stability cases that represent a range of critical system conditions for a range of forecast demand levels and study years. The dynamic information used in the 2013 RTEP analysis came from the 2012 series MMWG dynamics cases, and the data required by NERC Standards MOD-026-1, and MOD-027-1 already exists in these cases.

Compliance

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

“R1 Each Transmission Planner shall provide the following requested information to the Generator Owner within 90 calendar days of receiving a written request: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

- Instructions on how to obtain the list of excitation control system or plant volt/var control function models that are acceptable to the Transmission Planner for use in dynamic simulation,
Instructions on how to obtain the dynamic excitation control system or plant volt/var control function model library block diagrams and/or data sheets for models that are acceptable to the Transmission Planner, or

Model data for any of the Generator Owner’s existing applicable unit specific excitation control system or plant volt/var control function contained in the Transmission Planner’s dynamic database from the current (in-use) models, including generator MVA base."

“R6. Each Transmission Planner shall provide a written response to the Generator Owner within 90 calendar days of receiving the verified excitation control system or plant volt/var control function model information in accordance with Requirement R2 that the model is usable (meets the criteria specified in Parts 6.1 through 6.3) or is not usable.

6.1. The excitation control system or plant volt/var control function model initializes to compute modeling data without error,

6.2. A no-disturbance simulation results in negligible transients, and

6.3. For an otherwise stable simulation, a disturbance simulation results in the excitation control and plant volt/var control function model exhibiting positive damping.

If the model is not usable, the Transmission Planner shall provide a technical description of why the model is not usable. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]"

Instructions for obtaining MOD 26 data, making updates if required, and receiving confirmation that these changes are useable are available at:
http://www.pjm.com/~media/documents/whitepapers/compliance/pjm-mod-026-1-requirement-r1.ashx

MOD-027-1 — Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions

“R1. Each Transmission Planner shall provide the following requested information to the Generator Owner within 90 calendar days of receiving a written request: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

Instructions on how to obtain the list of turbine/governor and load control or active power/frequency control system models that are acceptable to the Transmission Planner for use in dynamic simulation,

Instructions on how to obtain the dynamic turbine/governor and load control or active power/frequency control function model library block diagrams and/or data sheets for models that are acceptable to the Transmission Planner, or
• Model data for any of the Generator Owner’s existing applicable unit specific
turbine/governor and load control or active power/frequency control system
contained in the Transmission Planner’s dynamic database from the current (in-
use) models.”

“R5. Each Transmission Planner shall provide a written response to the
Generator Owner within 90 calendar days of receiving the turbine/governor and
load control or active power/frequency control system verified model information
in accordance with Requirement R2 that the model is usable (meets the criteria
specified in Parts 5.1 through 5.3) or is not usable.

5.1. The turbine/governor and load control or active power/frequency control
function model initializes to compute modeling data without error,

5.2. A no-disturbance simulation results in negligible transients, and

5.3. For an otherwise stable simulation, a disturbance simulation results in the
turbine/governor and load control or active power/frequency control model
exhibiting positive damping.

If the model is not usable, the Transmission Planner shall provide a technical
description of why the model is not usable. [Violation Risk Factor: Medium] [Time
Horizon: Operations Planning]”

Instructions for obtaining MOD 27 data, making updates if required, and receiving confirmation
that these changes are useable can be found at:
http://www.pjm.com/~/media/documents/whitepapers/compliance/pjm-mod-027-1-requirement-
r1.ashx

Conclusion
PJM is issuing this document to clarify that unless a specific Generator Owner has been
contacted directly by PJM regarding a data issue, the dynamics modeling information provided
in the 2012 series MMWG dynamics cases is usable for PJM analysis purposes. Directions for
obtaining MOD 26 and MOD 27 data used by PJM, and if required, changing this data are
available using the links above.
## Development History

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<th>Revision</th>
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| Tom Bowe  
Executive Director, Reliability and Compliance |

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<th>New CB</th>
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<td>Standards become enforceable 7/1/2014.</td>
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