NERC Standards MOD-026-1 and MOD-027-1

Yonas Habtemichael
Transmission Planning
RSCS Meeting
July 18, 2014
• Purpose:
  – To verify that the generator excitation control system or plant volt/var control function model (including the power system stabilizer model and the impedance compensator model) and the model parameters used in dynamic simulations accurately represent the generator excitation control system or plant volt/var control function behavior when assessing Bulk Electric System (BES) reliability

• PJM, as the Transmission Planner, is responsible for following requirements:
  – Requirement R1: Each TP shall provide instructions to obtain a list of acceptable models, instructions on how to obtain acceptable library block diagrams/data sheets, and model data of existing units
  – Requirement R6: Each TP shall provide a written response to the GO within 90 calendar days of receiving the verified excitation control system or plant volt/var control function model information in accordance with Requirements R2 that the model is usable or not usable; If the model is not usable, the TP shall provide a technical description of why the model is not usable.

• MOD-026-1 Document link containing instructions for GOs:
  http://www.pjm.com/~/media/documents/whitepapers/compliance/pjm-mod-026-1-requirement-r1.ashx
Purpose:

- To verify that the turbine/governor and load control or active power/frequency control model and the model parameters, used in dynamic simulations that assess Bulk Electric System (BES) reliability, accurately represent generator unit real power response to system frequency variations.

PJM, as the Transmission Planner, is responsible for following requirements:

- Requirement R1: Each TP shall provide instructions to obtain a list of acceptable models, instructions on how to obtain acceptable library block diagrams/data sheets, and model data of existing units.
- Requirement R5: Each TP shall provide a written response to the GO within 90 calendar days of receiving the verified turbine/governor control system and load control or active power/frequency control system verified model information in accordance with Requirements R2 that the model is usable or not usable; If the model is not usable, the TP shall provide a technical description of why the model is not usable.

MOD-027-1 Document link containing instructions for GOs:
http://www.pjm.com/~/media/documents/whitepapers/compliance/pjm-mod-027-1-requirement-r1.ashx
• PJM Compliance Bulletin (CB016):

• MOD-026-1 and MOD-027-1 requests and inquiries should be submitted to:
  NERC.Transmission.Planner@pjm.com
Questions?

NERC.Transmission.Planner@pjm.com