

PRC-024-1 Overview

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July, 2014

- While standard does not apply to PJM, the standard sets generator performance expectations during frequency and voltage excursions
 - Review those expectations
- These expectations may be tied to the Advanced Inverter efforts

- Title: Generator Frequency and Voltage Protective Relay Settings (PRC-024-1)
- Purpose: Ensure Generator Owners set their generation protective relays such that generating units remain connected during defined frequency and voltage excursions.
- Applicability: Generator Owner
- Effective Date: 7/1/2016

- R1:
 - Generator Owners must set their protective relaying such that the generator frequency protective relaying does not trip the unit within the “no trip zone” with several exceptions
 - “no trip zone” is specified in Attachment 1 – Off Nominal Frequency Capability Curve by interconnection

- R2:
 - Generator Owners must set their protective relaying such that the generator voltage protective relaying does not trip the unit as a result of a voltage excursion caused by an event on the transmission system that remains within the “no trip zone” with several exceptions
 - “no trip zone” is specified in Attachment 2 – Voltage Ride-Through Time Duration Curve

- R3:
 - Generator Owners must document known regulatory or equipment limitation that prevents the unit with frequency or voltage protective relays from meeting the relay setting criteria in R1 and R2
 - Generator Owners must communicate limitations to their **PC TP** within 30 calendar days known limitation

- R4:
 - Generator Owners must provide their generator protection trip settings associated with Requirements R1 and R2 to the **PC or TP** that models the units within 60 calendar days of a written request or within 60 days of a change to settings unless not required by the PC or TP