PRC-024-1 Overview

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Objectives

• 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