Control, Protection and Inverter Submission Requirements
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File Submission Requirements and RIMS naming conventions

Bucket 3

- Control and Protection – XXNGRXXXX ControlProtection Ver1.pdf
  - Relay settings: Submit in PDF Format only, one file per relay setting
  - Protection Single Line Diagram: must include interconnection of relays
  - Three-line diagrams
- Inverters – XXXNGRXXXX ControlProtection InverterReport Ver1.pdf
  - Attachment A - XXXNGRXXXX ControlProtectionInverter Ver1.pdf
  - Inverter setting report – XXXNGRXXXX ControlProtection InverterReport Ver1.pdf

Bucket 5

Control and Protection – XXNGRXXXX FinalControlProtection Report Ver1.pdf
- Final As-left settings
- Certified Relay test reports
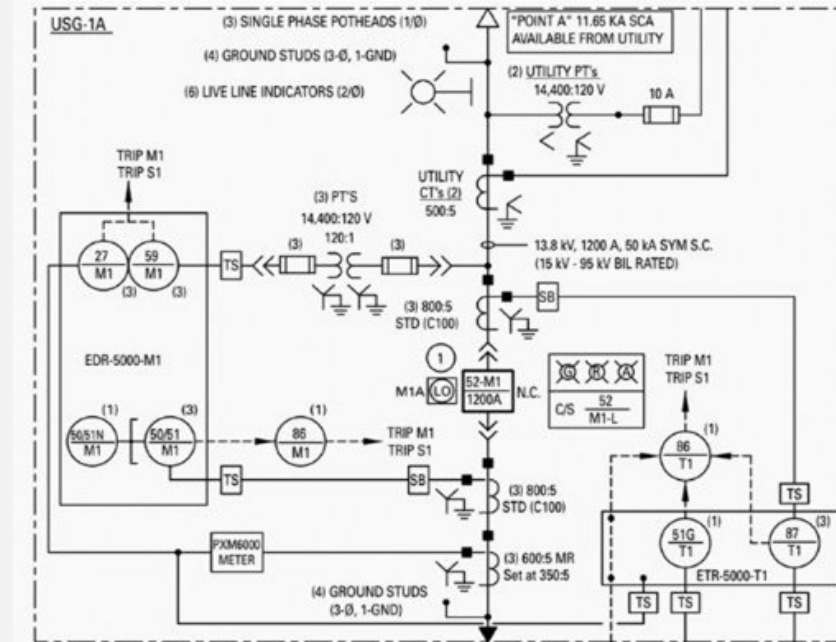
Control and Protection Review

Goals

Bucket 3:

- Verify voltage and frequency ride through settings are correct based on PRC-024-3 and soon PRC-029
- Confirm Relay settings and SLD's match, provide overlapping protection zones

Bucket 5:

- Verify that installed settings match reviewed settings and perform as designed

Inverter Review

Goals

Bucket 3: Verify that the overall system design matches what was studied and meets ISO Large Generator Interconnection Agreement (LGIA) and NERC requirements and / or recommendations

- Attachment A: Summary of control requirements, short circuit contributions, and overall plant design
- Inverter report and associated data: Specific setting requirements to meet all LGIA technical requirements, i.e. reactive current injection, voltage ride through, return from fault delays, etc…
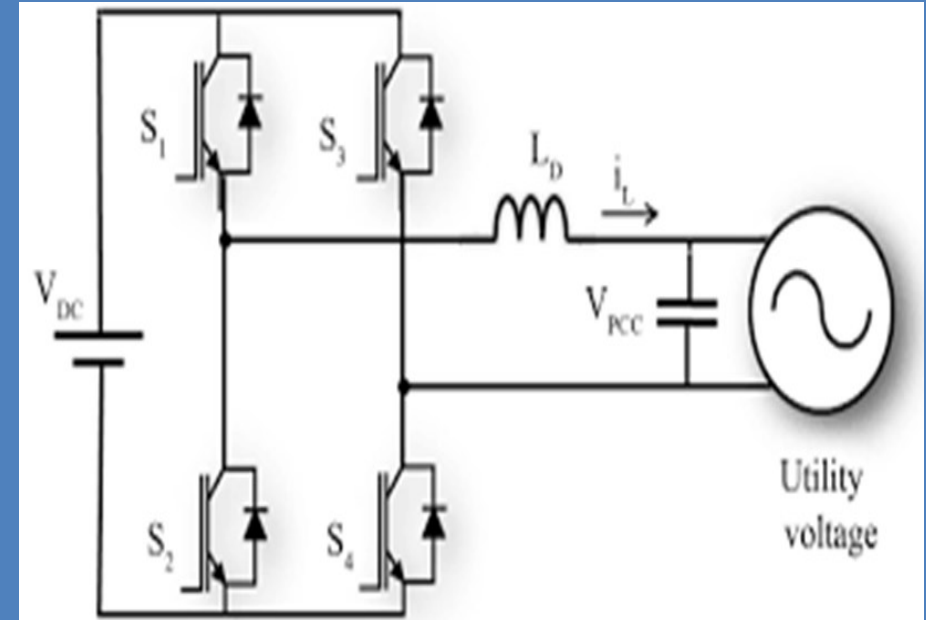
Observations to Note

- MMA's are required to be completed for inverter and technology changes prior to acceptance of Bucket 3 items. Most Inverter Based Resource (IBR) projects will require an MMA.

- Large IBR projects need to meet LGIA data sampling rate (minimum10ms) and data synchronization (GPS clock to 1ms).

- Data recording triggers need to be set to capture transient voltage events that result in per unit voltages below 0.9pu and 1.1pu.

Questions?