PRC-023

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Planning Committee

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- Requirements for TO, GO and Distribution Provider
  - In general - set relays so that they don't operate when they are not supposed to. Prevent potential for cascading trippings
- Requirements for Planning Coordinator
  - Determine which facilities between 100 kV and 200 kV are critical to the reliability of the BES
  - Need to have a process to determine critical facilities
    - Need to consider input from adjacent Planning Coordinators
  - Maintain a list of critical facilities
  - Provide the list to TO, GO, Distribution Provider, adjacent Planning Coordinators and Reliability Coordinators

Proposal to Select Critical Facilities 100-200kV

Step 1 – N-1-1 Analysis

- Identify any N-1-1 contingency pairs and the overloaded facility
- System adjustments not considered

Step 2 - N-1-1-1 Analysis

- Outage the overloaded facility along with the N-1-1 pair causing the overload from Step 1.
- Monitor for additional overloads

Step 3 – Identify PRC-023 Critical Facilities

- Any 100-200 kV facility that is outaged following the N-1-1 combinations from Step 2 and resulting in additional overloads has the potential for cascade tripping and will be considered a critical facility

PRC– Analysis Result

- Critical transmission facilities 100-200kV
- Critical transformers if secondary winding 100-200kV

Transmission Owner	# of PRC-023 Defined Critical Facilities
AE	6
AEP	47
APS	29
BG&E	8
ComED	140
Dayton	6
Dominion	1
DP&L	2
JCPL	3
Meted	14
PECO	7
Penelec	17
PEPCO	10
PSEG	9
Grand Total	306

Tielines	
AEP/Dominion	2
AEP/NIPS	2
APS/AEP	1
Meted/JCPL	2

Next Steps

- Finish development of software to perform the proposed analysis
- Consider input from adjoining Planning Coordinators and Reliability Coordinators
- Finalize the proposed PJM Manual language
- Provide the list of critical facilities to TO, GO, Distribution Provider, adjacent Planning Coordinators and Reliability Coordinators