

DER Ride Through: Issue Charge and Problem Statement

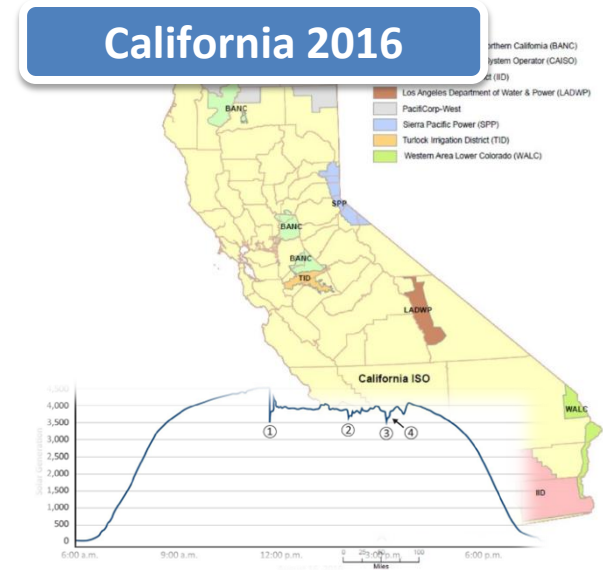
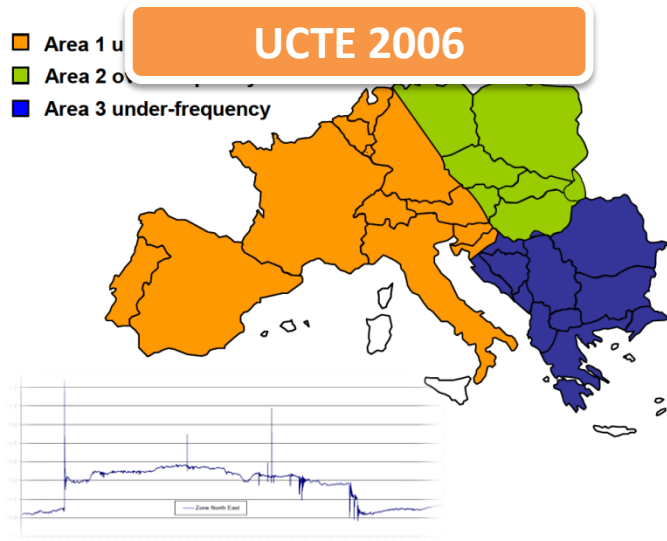
Emanuel Bernabeu, Ph.D.
Director, Applied Innovation & Analytics

Planning Committee
November 8, 2018

Ride-Through

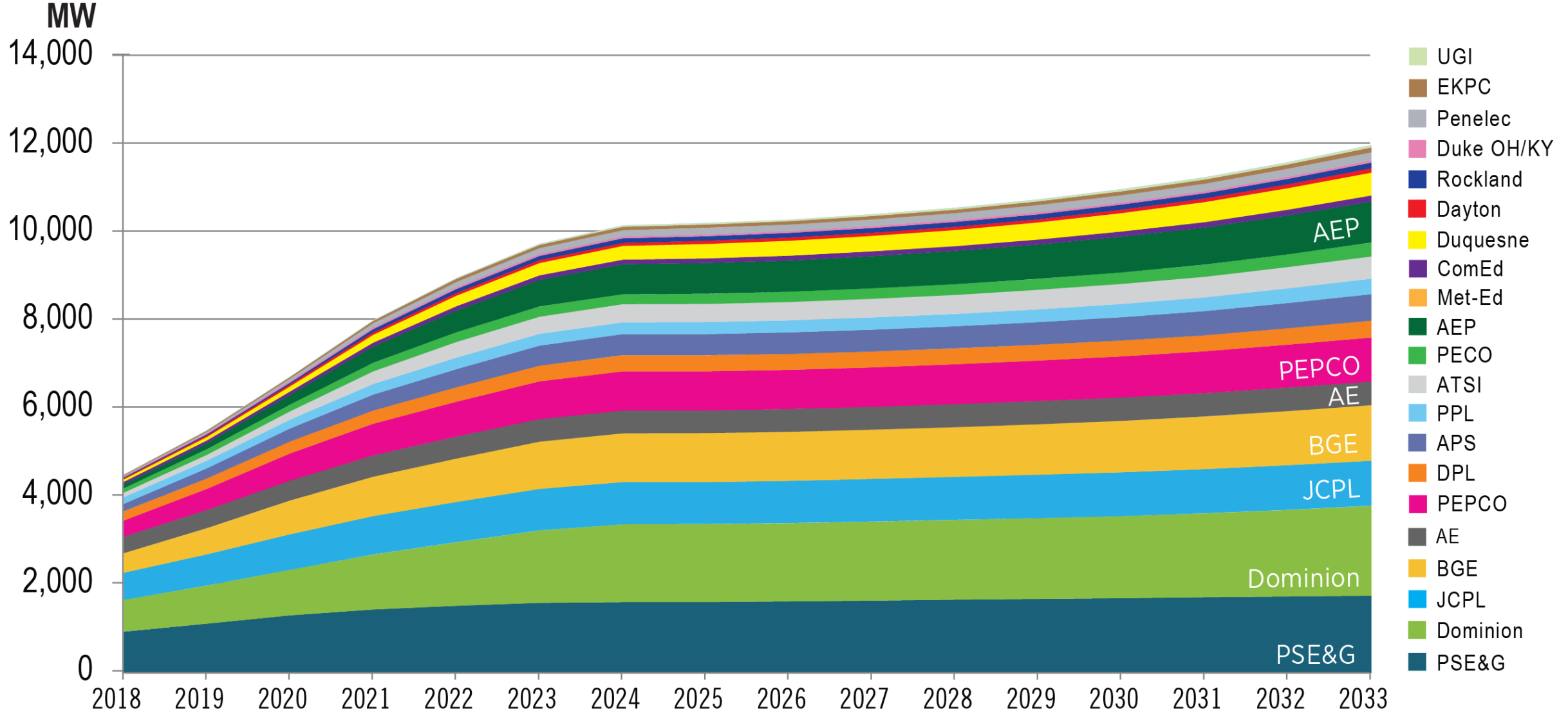
Reconnection
(Uncontrolled)

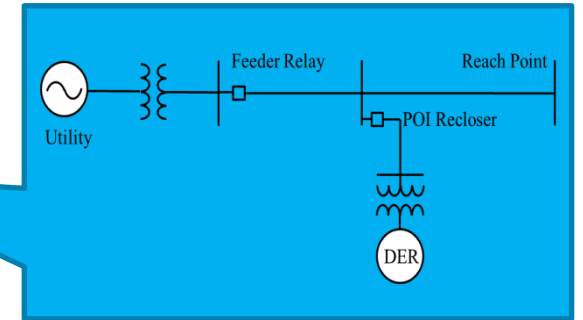
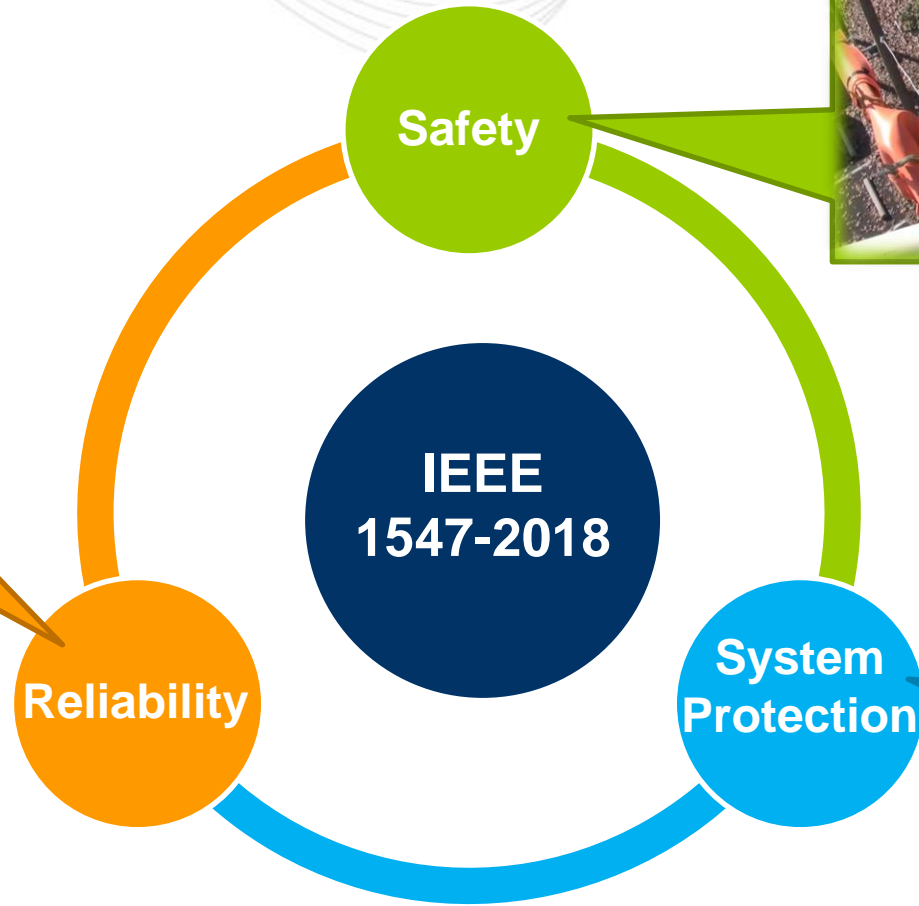
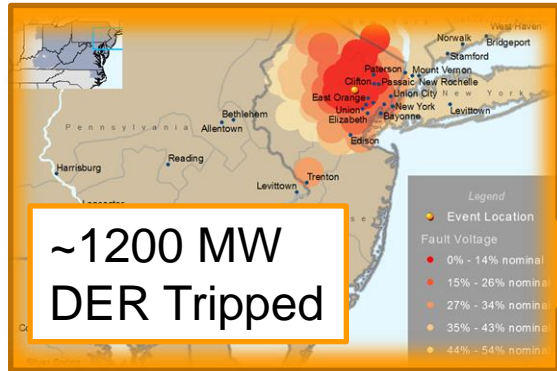
Momentary
Cessation



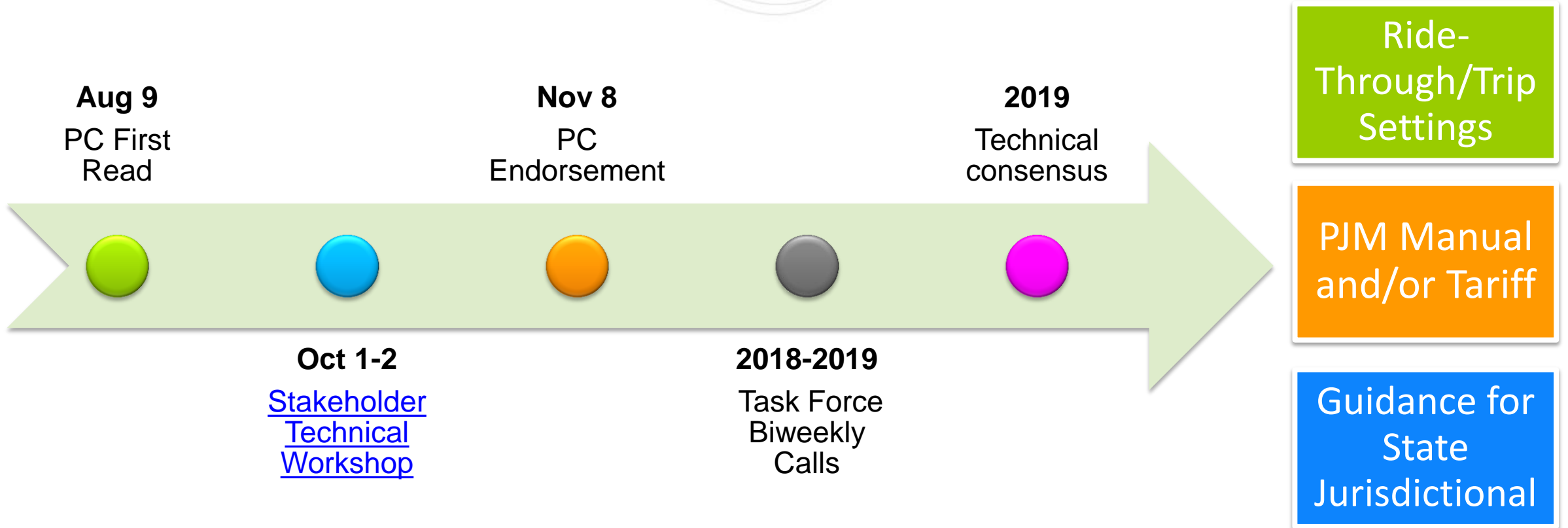


DER Deployment in PJM



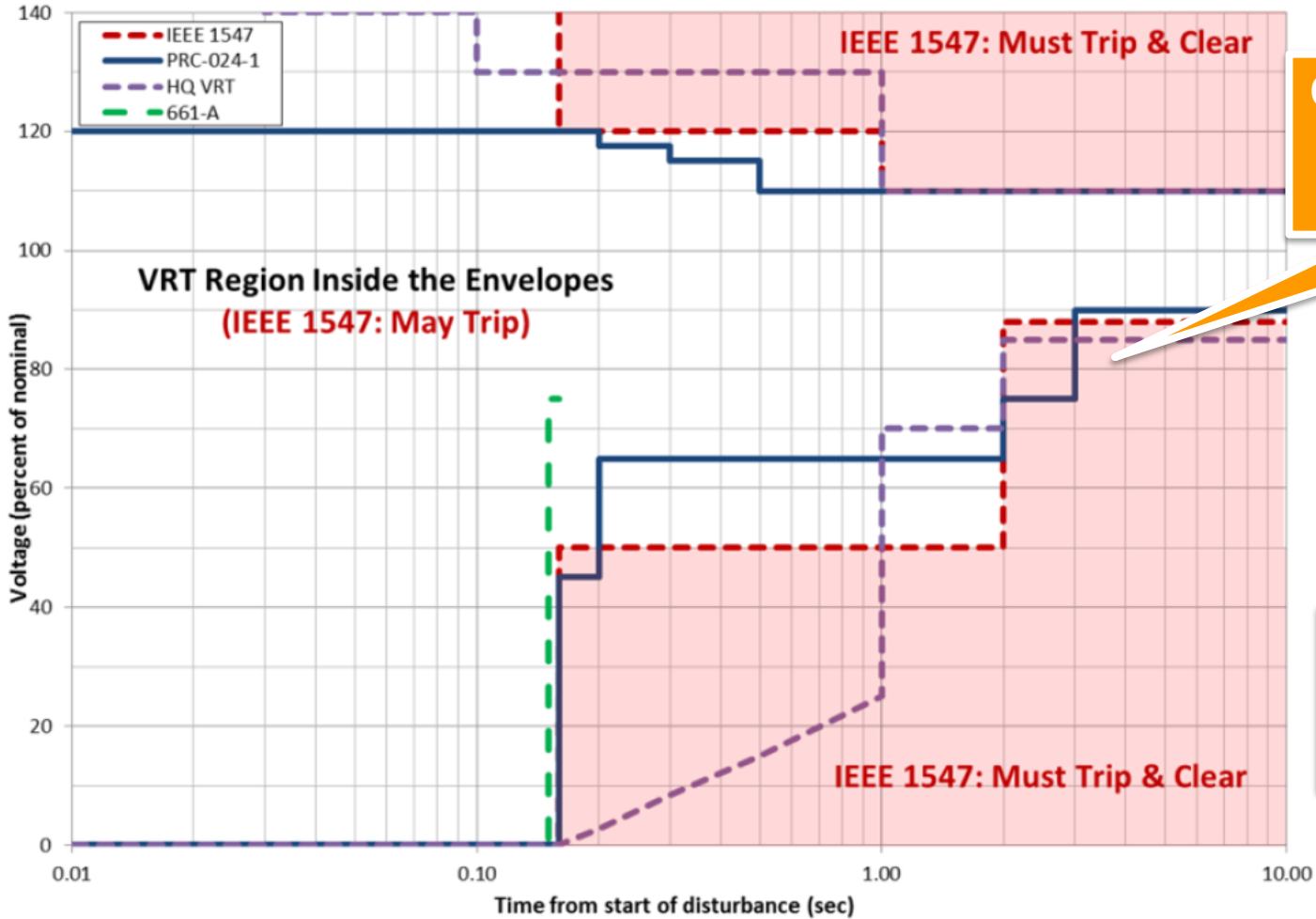


PJM Stakeholder Effort for DER Ride Through

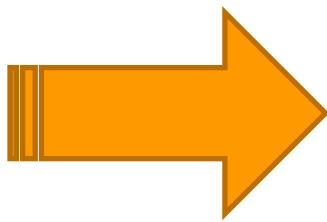


- PJM-wide consensus across T+D on preferred IEEE 1547-2018 Ride-Through/Trip Settings for DER (e.g., Category II with specified trip adjustments and addition of momentary cessation).
 - More than one Ride-Through/Trip Setting may be needed: e.g., a Category I and a Category II
- Deliverables:
 - 1) Ride-Through/Trip Settings.
 - 2) Proposed PJM manual language changes or other applicable PJM governing documents, if needed.
 - 3) A guide (best practices) for state/local regulators.

- Ride-Through capability and trip parameters only.
 - Not voltage regulation or communications, etc.
- PJM discussion is all DER
- Not retroactive.
- Connected to radial distribution < 50 kV
 - Not connected to BPS or meshed sub-transmission.



Old IEEE 1547 "Shall Trip" Conflicts with PRC-024



IEEE 1547-2018
Standard for DER Interconnection

New 1547-2018 Requires "Ride Through"

Considers both synchronous and inverter-based DER

Summary of Issue Charge Amendments

