



# PJM Ad-Hoc DER Ride-through Implementation Process: Report Out on Feb 28 Trial Workshop

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March 26, 2018



# PJM Support for Technical Consensus on Requirements

Feb 28: Preliminary trial workshop w/ 4 utilities (T and D)

March: Report out on trial workshop

Summer: Workshop covering all of PJM utilities

2018: Ongoing collaboration

2019: Final Documentation of Consensus Ride Through and Trip Parameters

PJM Rules

Distribution Utility Discussions under Local Regulation

- No trust consensus on dependability of anti-islanding algorithms.
- Risk of arc-flash shock and burn for lineman hot work increase with increasing ride-through DER deployment.
- Frequency ride through must address catastrophic wide-area transmission islanding/system separation.

# Primary Concerns on Under-Voltage Ride Through

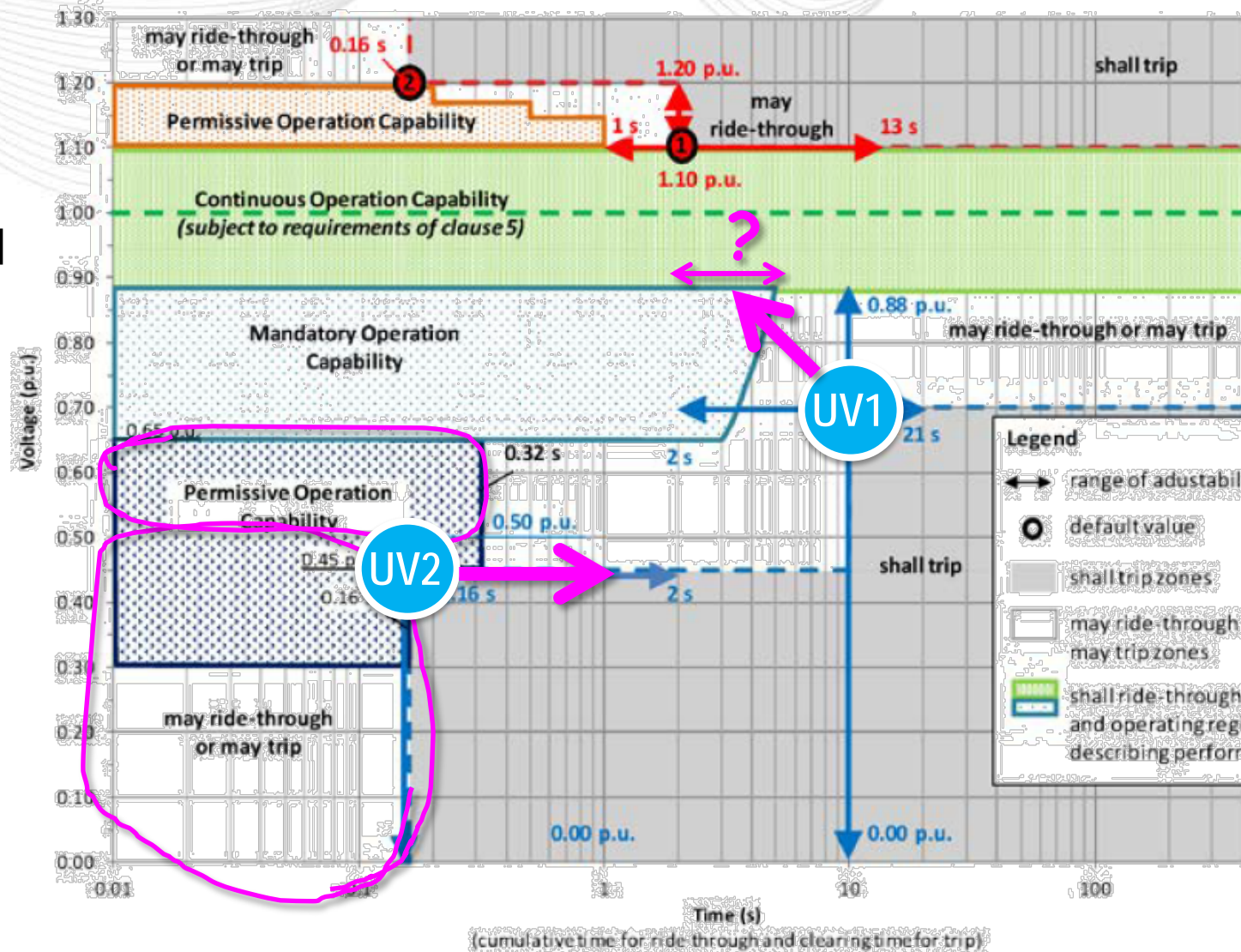
	Arc-flash	Reclosing	Dist. Protection	BPS Reliability
UV1	X	X		
UV2			X → Momentary cessation	X → Increase clearing time

# pjm® Changes to “Straw Proposal” for DER Voltage Ride Through

Pre-workshop: IEEE 1547-2018  
 “Category II” with default settings

Post-workshop modifications:

- UV1 increased → 2 – 5 seconds and volts increased → 88% for arc-flash and recloser concerns.
- UV2 time decreased → 1.1 seconds for delayed transmission fault clearing.
- “Permissive Operation” range and severe low voltage “may trip” range is specified to “Mandatory Operation” for  $V > 0.50$  and “Momentary Cessation” for  $V < 0.50$ .



- Chatham House rule is helpful for achieving consensus.
- Anticipating longer, 1.5-day workshop end of summer
- Anticipating significant webinar training for attendees
- Small break-out groups → productive approach



- Need to specify intended “flexibility” framework in applying the technical consensus”. Options:
  1. A PJM statement on a few “no go” zones and then PJM steps back (most flexible);
  2. A single agreed set of preferred parameters that are only to be adjusted per-utility basis;
  3. ... adjusted on a per-local-area basis;
  4. ...adjusted on a per-unit basis (least flexible)