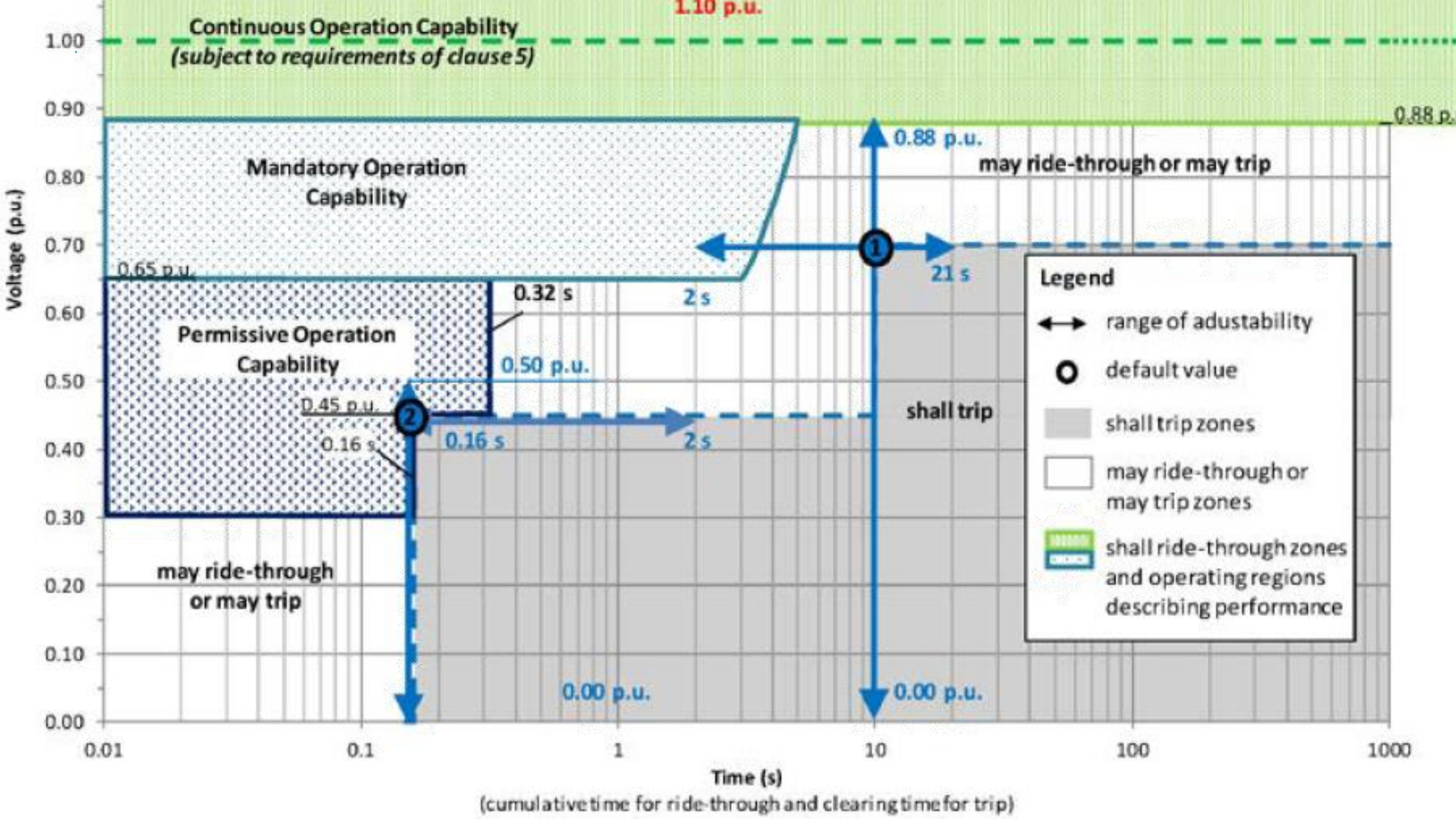


Recapping Day 1 and Breakout Prep

- **Mandatory Operation** – must not trip; must continue producing pre-disturbance real and reactive current.
- **Momentary Cessation** – must stop producing real current, with rapid return to pre-disturbance output when conditions return to normal.
- **Permissive Operation** – must not trip; may continue producing real current or not.
 - Could accommodate either Mandatory Operation or Momentary Cessation
- **May Ride Through or May Trip** – Allowed to trip, but not required to trip.
- **Trip** – cessation of output without immediate return to service (wait ~100s of seconds);
 - **Return to service** – re-entry of DER to service following a trip; equivalent to start-up of DER.



“Strawman” for PJM DER Voltage Ride Through

IEEE 1547-2018 “Category II” with adjusted trip settings and additions as follows:

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

