

Non-wholesale DER (BtMG) Observability

TOA-AC

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- Non-wholesale DER = generation (including storage) that does not participate in the wholesale markets (either as "front of meter" generation or demand response) and is used to self-serve load
 - Behind the Meter Generation (BtMG)
 - Cogen/CHP, emergency diesel, CTs, batteries, solar, etc.
 - Non-retail Behind the Meter Generation (NRBtMG)
 - Primarily Muni/Coop generation



Why does PJM need non-wholesale DER information?

- System Operations
 - Dispatcher situational awareness
 - Mitigate impact of manual load dump or local load shed
 - Improve short term load forecast and/or understand load forecast variance
- Planning
 - Improve long term load forecast or understand load forecast variance
- Manage existing NRBtMG and BtMG requirements (including telemetry & metering)

PJM will identify non-wholesale DER/BtMG (>1MW) on annual basis

- Primarily use EIA860 public data



TO verifies/adds information so resources can be modelled for PCLLRW tool

- PJM Transmission Substation, Voltage, Equipment Name
- TO may provide additional information to PJM if available and able to release to PJM without confidentiality issues



Communication to non-wholesale DER/BtMG during grid emergency

- TO may communicate downstream, as needed, to non-wholesale DER/BtMG through EDC or muni/coop as necessary
- Non-wholesale DER/BtMG modelled in PJM PCLLRW tool
 - Local issue – identify resources and their expected impact (helps/hurts)
 - Wider issue – list of resources in zone

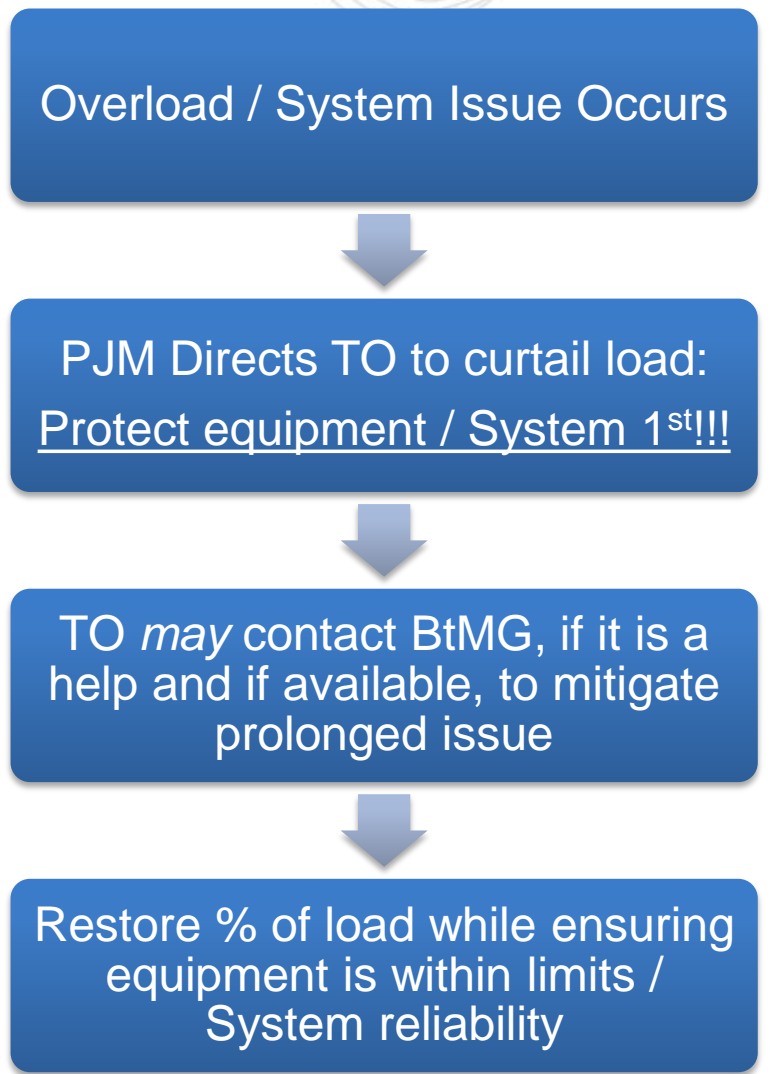
PJM *Emergency Operations Manual* ([M-13](#)):

❑ Load Shed Directive

- Local in nature;
- Typically to protect a single piece of transmission equipment.

❑ Manual Load Dump Action

- ❑ Wide-area System issues;
- ❑ Typically to protect the System from collapse.





Reviewed proposal/manual language at other stakeholder meetings to ensure members are aware of changes: 6/5 – OC, 7/5 – SOS-T, 7/10 – OC, 7/18 – TOA-AC