Distribution Task Team Draft Roadmap of Activities & Projects

Distribution Task Team (DisTT) Co-leads: Dan Dietmeyer, Panos Moutis 2023 Spring WG meeting – DisTT Break-out Session



Overview of DisTT Activities/Project Roadmap

- 1. Train the (utility) Trainer on Distribution Sync'd measurement uses
- 2. Inverter-Based Resources (IBR) & DG effects on PMU requirements
- 3. PMU-driven Value Cases for IBR- & DG-rich grids
- 4. Fault location at Distribution Systems (DSs) with Sync'd measurements
- 5. Wildfire detection & response at DSs with Sync'd measurements
- 6. PMU-based network simulation for IBR- & DG-rich grids & fault location
- 7. IT & Communication challenges with Sync'd measurements in DSs
- 8. Visualization of Sync'd measurements in DSs utilities' control room

Spring WG meetings activities

- Determine immediate steps for projects 1-4 (see previous slide)
- Set a timeline of actions & expectations
- Edit/update aims/framework if necessary

1. Train the Trainer workshop on Synchronized Measurement use in the utility at Distribution

- Value was more critically identified in training/informing "champions" at the decision making level rather than wide-angled training
- S&C, SRP and other utilities/DSOs will be contacted to collect managers' experiences and angles and define workshop framework
- Panos to follow up with above utilities and email blast others within NASPI for the same reason
- LEAD: Dan Dietmeyer

2 & 3. IBR and DG effects on PMU requirements and arising value propositions.

- Organize NASPI webinar with UNIFI representative on an explicit angle of system measurements/sensing for grid forming IBR control
- Ken (EPG) to summarize some points from his task group's activities on IBR effects to 'expectations' for distribution grid PMUs (internal to DisTT briefing)
- Following above 2, we organize a webinar panel with UNIFI, Ken, Hamed, others (?) and articulate the IBR-PMU (distribution) 'relationship' clearly
- LEAD: Panos Moutis

4. Distribution Fault Location using synchronized measurements

- Value of the application questionable for practical reasons (Bryce)
- New framing for project: Determine distribution grid characteristics or operating expectations that do not require PMU use
- Having *persistently* brainstormed "value" propositions has been becoming futile and is utility/DSO-specific; a negative framing will point to *potential* value propositions without needing to be explicit
- A protocol of distribution grid characteristics, operating intervals, etc. will point to cases that PMUs cannot possibly offer meaningful value we work it from there...
- LEADS: Dan Dietmeyer/Panos Moutis