Distribution Task Team (DisTT)

Update: April 13, 2022
Mission Statement

The mission of the NASPI Distribution Task Team is to foster the use and capabilities of networked PMUs at the medium-voltage distribution level, beyond the substation.

This group shares information in support of effective research, development and deployment of distribution PMUs.

We aim to create a community to solve technical and other challenges specific to distribution PMU technology and applications.
2021 Activities

- DisTT provided feedback to Quanta / ORNL / SDG&E study on distribution system applications for synchronized measurements
  - The report has been finalized and was released in September 2021. This will likely have influence on future working plans for the DisTT.

- DisTT is providing input to IEEE Working Group C41 on requirements for distribution PMUs (contact: Ken Martin)
Ongoing Interest:

Characterize use cases for synchronized measurements in distribution systems, and associated requirements

We try to gather information about:

• types of measurements and their uses
• the measurement environment and its impact on PMU performance requirements
• applications and their data needs.

Priority: field-deployed applications
but information about lower-TRL research applications is also relevant.
Different Types of Requirements for Measurement Data

- What are the requirements of sensor hardware and the data infrastructure to support a given application?
- How should these requirements be quantified and formalized?
- Where do various applications presented at this WG meeting fit?
2022 & Future Activities

• Presentations on monthly calls about new synchronized measurement applications and implementation experience

• Develop a proposal for work with S&C in Distribution PMU Network simulation and applications of technology for PMU fault location.
  – Methods of fault location using PMU’s. PMU Accuracy & data rate requirements?
  – Inverter Based Resource (i.e. emerging tech in microgrids, battery energy storage, and large scale wind/solar) performance observation and minimum data rates?
  – Research available information on NREL to compliment this work.

• Thoughts on creating a “train the trainer” workshop on distribution applications for utilities?

• Interactive study with public data on ni4ai.org
Joint calls with CRSTT: fourth Wednesday at 1 pm Pacific / 4 pm Eastern
Next call: Wednesday, April 27 at 1 pm PDT / 4 pm EDT / 20:00 UTC

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