



Distribution Task Team (DisTT)

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.

Past Work Products

NASPI-2018-TR-001



Synchrophasor Monitoring for Distribution Systems:

Technical Foundations and Applications

A White Paper by the NASPI Distribution Task Team

January 2018

NASPI-2020-TR-016



Synchronized Measurements and their Applications in Distribution Systems: An Update

June 2020

Contributors in alphabetical order:

Reza Arghandeh, Mohini Bariya, George Cotter, Deepjyoti Deka, Dan Dietmeyer, Laurel Dunn, Bryce Johanneck, Christoph Lackner, Panayiotis Moutis, Sai Akhil Reddy Konakalla, Younes Seyedi, Alireza Shasavari, Anurag Srivastava and Alexandra von Meier (editor)

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

Compile information about

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

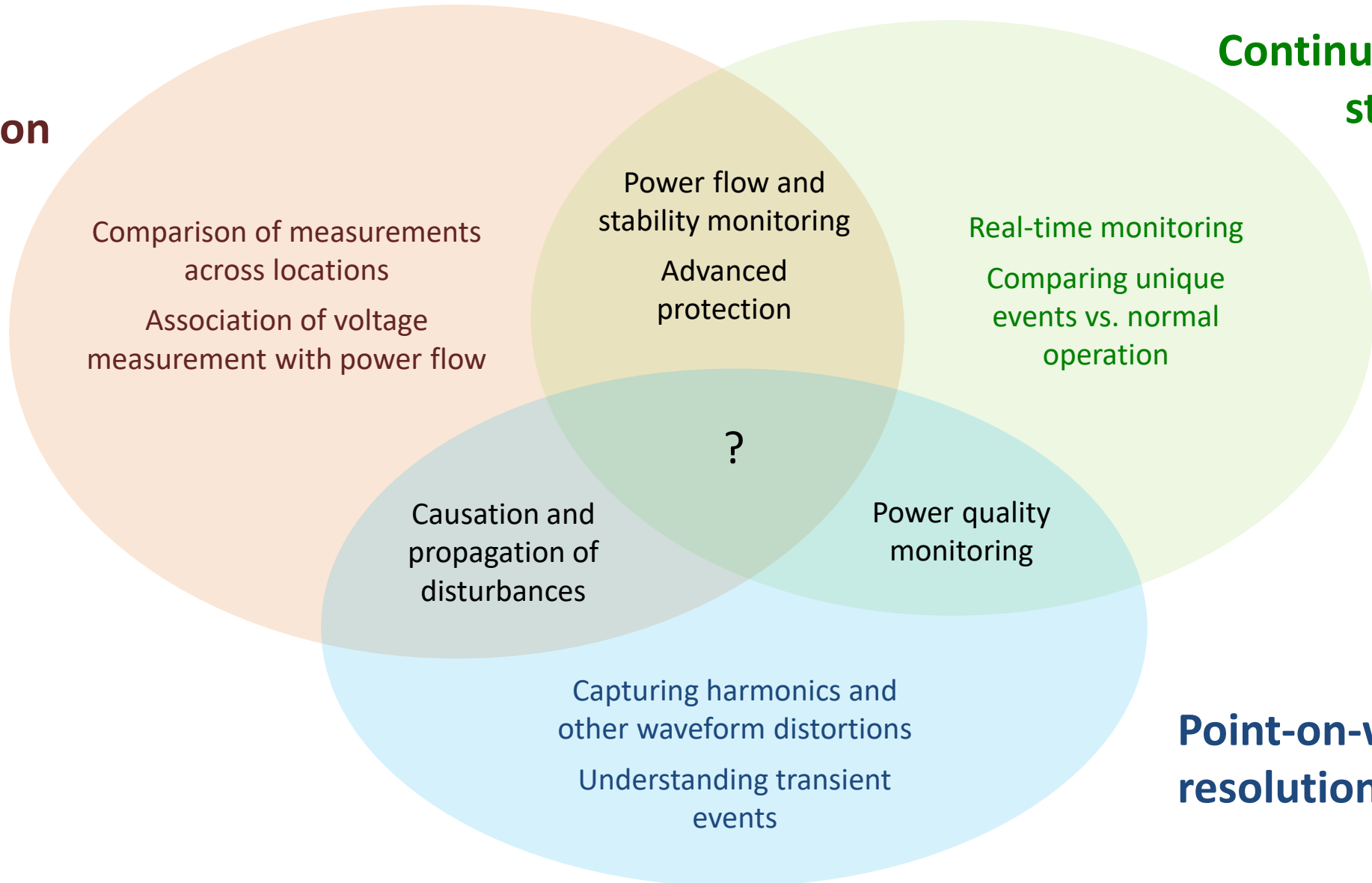
Priority: *field-deployed applications*

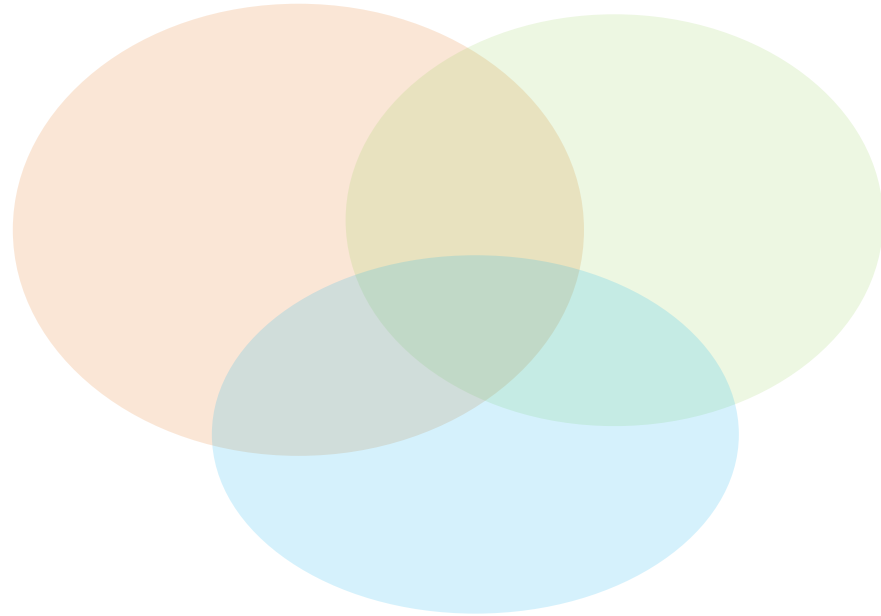
but information about lower-TRL research applications is also relevant.

Different Dimensions of Requirements: Thinking out Loud

Precise time-synchronization

Continuous data streaming





Help refine this diagram!

- What new applications and use cases belong in each set or intersection?
- How should requirements be quantified?
- Where does each of the applications presented in this WG meeting fit?

Upcoming Conference Panel with DisTT Members

Synchrophasor Measurements in Distribution Systems – Use Cases and Path Forward (IEEE SGSM, May 2021)

- Panos Moutis, Carnegie Mellon University (*Panel Organizer*)
- Omid Alizadeh-Mousavi, DEPSys SA, Switzerland
Edge computing monitoring infrastructure for scalable distribution grid monitoring
- Ken Martin, Electric Power Group
What can PMUs provide and what are the challenges in developing a standard for them in the distribution environment?
- Paul Pabst, ComEd
Distribution PMU Deployment and Analytics
- Sascha von Meier, UC Berkeley
Distribution Synchrophasors for Control Applications
- Greg Zweigle, Schweitzer Engineering Labs
Distribution Time-Synchronized Measurements: Sensors and Applications

Next call (joint with CRSTT): Tuesday, April 27, 10 am PDT / 1pm EDT

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