Mission Statement

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

This group will share information in support of effective research, development and deployment of distribution PMUs and their applications.

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

See <u>www.naspi.org/distt</u>



Distribution Task Team Session Springfield MA, Sep 26, 2017

Agenda

Introductions

White Paper: Table of Contents overview

What's missing

Individual assignments

New Business



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WP Table of contents as of today

- Premise & context of distribution PMUs
- Definitions of quantities
- Practical aspects of installation and use
- Communication and data collection
- Distribution-specific applications
- Data quality, transducer errors
- More refined definition of quantities
- History of PMU development
- Ongoing distribution PMU research efforts & deployments



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Suggestion

Emphasize "synchronized measurements" over "PMUs"

Additional Use Cases

- Distribution level automated control
- Microgrid monitoring, coordination and control
- State estimation (hard)
- Validate ancillary services/demand response

Additional topics to address in White Paper:

- Community dependence on distribution grid and vulnerabilities (cyber-security issues)
- Privacy
- Significance of epistemological difficulties with precise φ



Possible next work assignment:

Practical guide to PMU placement in distribution systems

Future study:

- Integration of PMUs into transformers, inverters
- Supporting DER integration and microgrid integration with PMUs



DisTT Logistics

Workspace <u>https://spteams1.pnnl.gov/sites/naspi/distt/default.aspx</u> Request access from Teresa Carlon, <u>teresa.carlon@pnnl.gov</u>

Using the email list <u>naspi-taskteam-distribution@lyris.pnnl.gov</u>

Deadline for White Paper additions & comments: Friday, October 13 email to Sascha von Meier, <u>vonmeier@berkeley.edu</u>

