Distribution Task Team (DisTT) Conference Call Minutes
September 13, 2018 10:00 am PT/1:00pm ET

Sascha Von Meier (vonmeier@berkeley.edu) and
Luigi Vanfretti (luigi.vanfretti@gmail.com) Co-leads
Teresa Carlon (teresa.carlon@pnnl.gov), Support
Email list address: naspi-taskteam-distribution@lyris.pnnl.gov

Attendees
Roll call – see list below.

Action Items
Erik, Sascha, Teresa, and Harold; working survey session to incorporate questionnaire feedback.
ALL; NASPI Work Group meeting registration is now open. Please visit the NASPI website for details.

Old business

New business

- Point-on-wave repository presented by Guglielmo Frigo; slides can be downloaded from the NASPI website. Wonderful resource for the technical community and a great example how others could contribute. NIST has plans to use this data for some upcoming projects. Sascha had a question about the data storage size, what is realistic to store and archive? What are the particular limitations? Guglielmo asserted the problem on the PMU and the backup storage. Waveform recording problematic due to sampling rate of 50 Hz. Space is very important at ~ 7-8 MBs for two seconds. The data storage topic will continue to be explored.
- Allen Goldstein: IEEE PSRC C23 WG coordinating of synchrophasor activities. IEEE is aware of the development of applications for PMUs, number of working groups related to PMUs within IEEE. IEEE would like to know what are the existing work products that have come out of the DisTT to-date and what are the planned work products? Sascha asserted the DisTT has a overview report titled "Synchrophasor Monitoring for Distribution Systems -Technical Foundations and Applications" and two upcoming work products are 1) have a public repository of sharable data, working on datasets to be accessible and explained, 2) update on distribution PMU installation and use cases (what is being done and where) and what value people are trying to get. Has the DisTT started working on a Distribution PMU standard? No, not yet. Need to start from the bottom up and have a firm understanding of the datasets and what applications are currently being used. Allen invited anyone to attend the next PSRC / C23 Coordination of Synchrophasor Related Activities Work Group meeting January 13-17, 2019 in Garden Grove, CA. Learn more here.
- Feedback on the distribution PMU application survey has been received. A few DisTT members (noted above) will be meeting next Monday, September 17, 2018, to incorporate the feedback into survey and prepare for publication. If you would like to participate please email teresa.carlon@pnnl.gov.
- What do we hope to get out of our breakout session? Topics so far include; distribution PMU survey, repository, discussion on data storage issue. Any technical topics you would like to hear please email Sascha, Luigi or Teresa to be included in the agenda.

Next meeting

- **Face-to-face in Philadelphia at the NASPI Work Group meeting in October.**

Reference Material

- Point-on-wave Data of EPFL-campus Distribution Network. The repository contains point-on-wave data collected on the 20 kV network of EPFL-campus, in a MV/LV substation supplying 2 office buildings and a 560 kWh/720 kVA battery energy storage system (BESS). The waveform recorder functionality has been integrated in the PMU developed in EPFL-DESL. The data are sampled at 50 kHz, with a duration of 2 seconds for each dataset. The data refer to static and dynamic operating conditions, obtained by controlling the BESS power injection.
- The *Synchrophasor Monitoring for Distribution Systems -Technical Foundations and Applications*
- DisTT web page: https://www.naspi.org/distt
- Topics of ongoing work for this group include:
  - Present practices, research, state of the art and challenges with distribution PMUs
  - Distribution PMU applications and use cases
  - Theoretical aspects of PMU measurements
  - Technical requirements and specifications for distribution PMUs
- Link to Distribution PMU Project inventory.
- Expected Data Requirements for Different Classes of PMU Applications.
- CRSTT Reference - NASPI Diagnosing Equipment Health and Mis-operations with PMU Data and the event summary table.
- U.S. Department of Energy Grid Modernization Lab Consortium (GMLC).

Attendees

Allen Goldstein
Erik Desrosiers
Harold Kirkham
James Follum
Luigi Vanfretti
Sascha von Meier
Teresa Carlon
Tom Rizy
Carl Benner
Guglielmo Frigo
DJ Anand