

## Distribution Task Team (DisTT) Conference Call Minutes

November 11, 2016 10-11 am PDT

Sascha Von Meier ([vonmeier@berkeley.edu](mailto:vonmeier@berkeley.edu)), Lead

Teresa Carlon ([teresa.carlon@pnnl.gov](mailto:teresa.carlon@pnnl.gov)), Support

Email list address: [naspi-taskteam-distribution@lyris.pnnl.gov](mailto:naspi-taskteam-distribution@lyris.pnnl.gov)

### Attendees

Roll call – see list below.

### Action Items

- **ALL**; Sascha would like volunteers to help write the multiple DisTT white papers. Please send Sascha an email if you have the expertise and time to help make this DisTT product a success!
- **ALL**; if you have any other technical areas that you feel the DisTT should focus on please send an email to Sascha.
- **Harold Kirkham**; will send TRL IEEE paper; applies Technology Readiness Levels (originally coined by NASA) specifically to Power Systems.
- **Harold Kirkham**; will send Teresa Carlon executive summary to post on the DisTT web page.
- CRSTT Reference - [NASPI Diagnosing Equipment Health and Mis-operations with PMU Data](#) and the [event summary table](#).

### Ongoing Business

- Recap of the NASPI Work Group meeting in Seattle and a review of the DisTT breakout session presentations. All the Work Group and DisTT meeting material can be found on the NASPI [website](#). The breakout session discussion addressed technical specs for distribution PMUs (see PowerPoint slides from that session).
- Breakout session decided that the DisTT will have a set of white papers and not just one white paper. Multiple white papers makes assigning writing sections easier.
- LBL Power Data Portal Reference Dataset / Emma Stewart – see [powerdata.lbl.gov](http://powerdata.lbl.gov) Merwin asked if the data was available to anyone (e.g. foreign nationals) and Emma replied “yes.” No intentional exclusion for access to the data. Stay tuned for more to come!
- Sascha would like to compile a detailed inventory of what people are doing around the world with distribution pmus. Living document? Include with white paper? What do people think? With some outreach this task could be completed. Data would be useful, but Merwin has concerns on how to get the data and how to maintain the data.
- One goal for the DisTT is to describe a set of use cases. Sascha would like to identify what we know and what we don’t know about requirements of distribution PMUs for different applications. We need some tangible bases for discussion. (Sascha shared draft *Table: Data Requirements* attachment – expected data requirements for different types of distribution PMU applications; not yet published.) Merwin thought this table was very useful to send to newcomers of this technology. Mike Cassiadoro asserted the CRSTT would like to create a set of operational use cases; how the technology can be used to improve system operations, define operational value with each use (e.g. outages). Perhaps a common library between the CRSTT and DisTT to help folks that don’t participate in NASPI and aren’t familiar with the technology. Sascha added that have a readiness level for each application might be useful (e.g. off the shelf or in development). Mike Cassiadoro will be sharing his template with Sascha. Mahdi suggested adding another column to the table with regards to security of expected data requirements. Sascha is a bit reluctant to open up the security requirements because it hasn’t been well addressed.

- We will need to divide up the current paper white paper into topics so writing assignments can be assigned. Need to decide which sections can stand alone.
  - Harold's history section is done.
  - Difference between transmission and distribution? Reza agree to write this section.
  - Do we need separate calls to discuss about the Noise topic or should we include it in one of our monthly calls. Harold thinks this items will require actual work. Harold will provide period updates to Sascha.
  - Data quality assessment was going to be written by Jerry.

### **Reference Material**

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

Draft white paper outline ([Google docs](#))

*Table: Data Requirements*

CRSTT Reference - [NASPI Diagnosing Equipment Health and Mis-operations with PMU Data](#) and the [event summary table](#).

### **Attendees**

Emma Stewart  
Frank Tuffner  
Harold Kirkham  
Mahdi Jamei  
Merwin Brown  
Sascha von Meier  
Teresa Carlon  
Mike Cassiadoro