

April 27, 2021 - Combined CRSTT/DisTT Call Notes

Control Room Solutions Task Team (CRSTT)

Co-leads, Michael Cassiadoro (mcassiadoro@totalreliabilitysolutions.com), and Jim Kleitsch (jkleitsch@atcllc.com)
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Distribution Task Team (DisTT)

Co-leads, Sascha Von Meier (vonmeier@berkeley.edu) and Dan Dietmeyer (DDietmeyer@semprautilities.com) Email list address: naspi-taskteamdistribution@lyris.pnnl.gov

Teresa Carlon, NASPI support and website and listserv contact (teresa.carlon@pnnl.gov)

Attendees

Roll call – see below.

Action items

None at this time.

CRSTT Update provided by Jim

- NASPI's April 13-15, 2021 Work Group meeting overview; over 180 attendees, significant discussion on system inertia monitoring. All the presentations have been uploaded, feel free to download.
- CRSTT Work Plan has been posted on the NASPI website: https://www.naspi.org/crstt
- Industry Update:
 - NERC Synchronized Measurement Work Group (SMWG)
 - IEEE Smart Grid Synchronized Measurements and Analytics (SGSMA) 2021 virtual event: https://www.sgsma2021.org/
- Updated list of real time ops uses
 - CRSTT would like to kick off an effort to update the list of real time ops uses. We need to start reaching out to folks and get some information. List of possible contacts are in the CRSTT agenda pg. 7; TVA, BPA, ISO-NE for oscillation monitoring, ISO-NE for oscillation source detection, etc. NDR can be our liaison with Dominion on this task.
- System Inertia Monitoring Ops Use Case Reactive Technologies will participate in the June 30 NASPI webinar. National Grid might also be involved in the webinar. The webinar material hopefully can be used to assist in developing the use case.
- Time-Synched Measures Training Update; scope changed because of Covid, in process of developing simulation videos (computer-based training approach for training), if you are interested in this effort and have a say in the development of materials please contact Mike or Eric Andersen (PNNL). TRS and PNNL to finish developing Time-Synchronized Measurements Simulation Training course in 2021.

DisTT Update provided by Sascha

- Sascha shared an update Mission Statement for the DisTT.
- Ongoing effort is to characterize use cases for synchronized measurement in distribution systems, and associated requirements.
 - Different dimensions of requirements; precise time synchronization, continuous data streaming, and point-on-wave resolution

- Significant applications and requirements
- NDR's asserted people are asking about difference between PMUs (synchrophasor measurement systems) at the distribution level, distribution beyond the substation vs. distribution inside the substation.
- Difference in types of requirements; precise time-synchronization, continuous data streaming, and point-on-wave resolution. Is there a 4th step that should be overlayed here that would be important to include? Alex asserted that maybe we should include *amplitude modulation* along with capturing harmonics and other wave form distortions. Significant applications and requirements comments? NDR get the status of the equipment for which the sensor is co-located.
- Point-on-wave resolution; any additional applications we should be mentioning in this context? Stuart commented identifying inverter caused oscillation modes, work has been done on this, using 200 Hz point on wave data focus on subharmonics behavior, a few Hz below synchronous frequency, but we essentially used 4x the frequency of interest to give us accurate visibility of sub synchronous components but also got accurate picture between 60-120 or 50-100 Hz so we could tell whether or not there was harmonics present in the grid.
- Continuous data streaming; is a SCADA reporting rate good enough? Applications that requirement continuous monitoring, any additional thoughts on this? Harold Kirkham suggested getting a hold of Jim Follum on his thoughts. NDR asserted that we are constantly reminded about control room assets. Adding "control applications" to this slide, per NDR. Anil commented do we need to keep track of grid forming resources and their impact on the system (grid forming vs grid following)? Potential impact in distribution PMUs.
- Roundtable: Laurel, wanted to mention enabling application to include geographic sighting and spatial coverage.
- No DisTT/CRSTT call in May due to other professional meetings.

Next Call: June 22, 2021 at 10:00am PT / 1:00pm ET.

Attendees

Andersen, Eric S

Asawa, Manjari

Breuhl, Michael

Brnobić, Dalibor

Carlon, Teresa A

Clark, Stuart

Dunn, Laurel

Hu, Yi

Jampala, Anil

Kirkham, Harold

Kleitsch, James

McEachern, Alex

Meier, Sascha von

Michael Cassiadoro

Moutis, Panos Nuthalapatim, Sarma NDR Vaides, Jorge