



February 25, 2020 Combined CRSTT/DisTT Call Notes

Control Room Solutions Task Team (CRSTT)

Co-leads, Michael Cassiadoro (mcassiadoro@totalreliabilitysolutions.com), Jim Kleitsch (jkleitsch@atcllc.com) and Sarma Nuthalapati (NDR) (ndrsarma@ieee.org)
Email list address: naspi-taskteam-controlroom@lyris.pnnl.gov

Distribution Task Team (DisTT)

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

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

Attendees

Roll call – see list below. Call led by Sacha and Jim.

Action Items

- ALL - Sascha would like to recruit volunteers to help write sections of the paper – please send an email to any of the team leads or Teresa.carlon@pnnl.gov if you have time to contribute. Link to report: https://docs.google.com/document/d/12n1Ca8abhbReiEongxFONq5g_IPhNqswrXuoji3GWHM/edit?usp=sharing
- ALL – **UPDATE:** NASPI meeting postponed! Leaving this item in the notes for a reminder. Mike Cassiadoro tentatively committed to forming a Use Case Panel session at the NASPI Work Group meeting April 2020; any vendor or utility that would like to participate in this panel session please reach out to Mike.

CRSTT

- Please reference the [agenda](#) for more details.
- Mission, goals, and objectives can be found on the CRSTT [webpage](#). Feel free to reach out to Mike, Jim, or NDR with any questions you might have on this topic.
- CRSTT is in the process updating the “Using Synchrophasor Data for Phase Angle Monitoring”, requests were sent on 2/17/2020 by NDR. Please respond by 3/20/20 so we can update the document prior to the April NASPI Work Group meeting.
- Video event files are educational. Please let us know if you have an event that you would like to share, let Jim know as he can help you make a video of your event.
- Use Case Documents; help you identify and solve problems at a high level. These documents are great resources to help you with a sales pitch when needed.
- Brainstorming session; open discussion about what we should be doing to prepare the change in generation profile to provide situational awareness to Operators of the system.
 - System monitoring and renewable resources; wind plants in the system, solar will be added. Fault in the area, unit output dropped about 50% in the area, 1 plant, 1% covering load in the system. What happens when you have a big fault, huge swing in generation? For the person in the control room what information can/should we

provide to them? Do they need to know this? What is the value? Do we provide this information in real-time? (The agenda shows the 45 second plot, slide 8).

- Line trip near generator. If this isn't normal, how do we alert? Jim would like to be more proactive than reactive when it comes to the issues. Need more tools to help do the analysis work. Panos asserted we can try to create libraries and papers for lessons learned (simulation data) and describing the situation at hand, put together a point of reference for example, when you see these measurement X, Y, and Z this may happen. Teresa has Panos' email if Jim or Mike would like to connect with him.
- Does inertia monitoring need to happen in the control room? Do operators need to know about normal/abnormal inertia? Can synchronized measurement data be used to monitor inertia? Sascha asserted that inertia might not be the variable that we need and was curious if we might need more academic research in this area to apply to this subject or does that research already exist? Jim asserted that perhaps the correct question needs to be formed and Sascha see this as having two actionable directions 1) provide grid operators will real-time information in situational awareness, 2) direct design and programming of the renewable resources, to say hey "we need you to do X" to be aggregated. Need better behavior to become easier to manage. Tom Rizy asserted that there have been studies in the past regarding the loss of inertia, historical trend, information is out there, not sure if inertia is the measurement we need. Maybe pounding at something that might not be a real issue. Tom also commented on the pattern Jim observed saying that the focus should be more on more signature pattern recognition, future for quick analysis on the fly. Jim is going to reach out to Evangelos at the recommendation of Panos. NDR suggested reaching out ERCOT.
- Jim would like to have a placeholder on the agenda for people who are facing issues and would like to share the information to help solve problems.

DisTT

- Sascha reviewed the outline of the report and who has volunteered to help write each section. Section two is the main body of the report; fault detection, location applications, etc, (see full document). Link to DisTT Report: https://docs.google.com/document/d/12n1Ca8abhbReiEongxFONq5g_IPhNqswrXuoji3GWHM/edit?usp=sharing
 - If you want to contribute, please add your name to the outline beside the section you would like to contribute.
 - Main effort is trying to scope the report the DisTT would like to write. If you are interested in contributing to the document, please contact Sasha, Dan or Teresa.
 - Section 2 is the main body of the report; fault detection and location, how to use synchronized measurement to detect and locate faults. Please see Google doc for the latest topics.
 - The goal is not to have a perfect document – that will never happen. If everyone works from the Google doc you can see the flow and style of writing from one section to the next. Sascha isn't opposed to dropping section if the content just isn't there at this time. The outline is NOT set in stone.
 - Document comments are encouraged! Please use them as necessary.

- Thank you to everyone who has offered to contribute to this report, we could always use more people to help write sections.
- Early text draft due by March 31, 2020. Formatted draft for circulation by 4/10/20.

Next conference call: March 24, 2020, 10:00am PT / 1:00pm ET.

Attendees

Bryce Johanneck
Christoph Lackner
Dan Brancaccio
Farnoosh Rahmatian
Brent Blanchard
Dan Dietmeyer
David Laverty
Jeff Zhao
Jim Kleitsch
Panos Moutis
Rajkumar Anumasula
Sai Akhil Reddy
Sarma Nuthalapati (NDR)
Sascha von Meier
Teresa Carlon
Tom Rzy
Younes Seyedi