

# **Control Room Solutions Task Team (CRSTT) Minutes**

Co-leads, Michael Cassiadoro (mcassiadoro@totalreliabilitysolutions.com) and Jim Kleitsch (jkleitsch@atcllc.com) Teresa Carlon, NASPI web site and listserv contact (teresa.carlon@pnnl.gov) Email list address: naspi-taskteam-controlroom@lyris.pnnl.gov

# September 19, 2018

### Attendees – See below. Call led by Mike.

### **Action Items**

- All: please register for the NASPI Work Group meeting if you plan on attending. Learn more here!
- Jim K.: will reach out to Ryan regarding current CIP information/presentation that can be shared with the CRSTT during the breakout session.
- **Mike C**: will contact SCE, SDG&E and others to determine interest in developing operational use case addressing the use of synchrophasor data to monitor synchronous devices.

#### **Old Business**

- NDR and Mike; updating the Phase Angle Monitoring spreadsheet and possibly the paper in an effort to keep the CRSTT documents current. (Download the paper). This task will be on hold until the Disturbance Location document has been drafted.
- CRSTT will have a joint panel session with the DisTT and DNMTT during the main NASPI work group meeting in Philly called Using Synchrophasor Technology to Determining Disturbance Locations. CRSTT will focus on transmission, the DisTT will focus on the distribution side and the DNMTT will explain what the data and network management needs are. Greg Zweigle offered to be a panelist if needed.
- **CRSTT** will have joint **breakout session** in Philly with the PRSVTT to discuss enhanced state estimation.
- If you have suggestions for the CRSTT agenda please send them to Mike, Jim or Teresa so we can include them.
- Final Determining Disturbance Locations (NDR) document will not be ready for the October Work Group meeting. Look for the paper in March 2019.
- o Using Synchrophasor Data to Monitor Reactive Power Balancing deliverable has not been started yet.
- Continue building library of events to demonstrate value PMU data provides when analyzing abnormal events and disturbance.
- o Add to the use case documents when an opportunity presents itself.

#### **New Business**

 Total Reliability Solutions will be collaborating with PNNL to develop a Use of Time-Synchronized Measurements in the Real-time Ops Horizon training course. The base materials will be made available to the public upon completion. Intended audience is RC, BA, and TOP System Operators tasked with monitoring and controlling the Bulk Electric System. "Train the Trainer" class will be held at PNNL in February 2019. Eric Andersen (eric.andersen@pnnl.gov) is PNNL's point-of-contact. More details can be found in today's agenda.

## **CRSTT Goals**

• Develop a series of use case summary docs that define how grid operators and electric utilities are using synchrophasor data to provide operational value.

- Prioritize and complete the remaining focus area documents.
- o Create additional video event files for use cases and simulated events.
- o Gather operator feedback on synchrophasor applications (best practices).
- o Support the development of synchrophasor-related training for operations staff.
- Develop a series of Lessons Learned documents related to the use of synchrophasor technology in the operations environment.

CRSTT will be getting together in Philly! See you there.

#### Reference Documents (also posted on the NASPI CRSTT web page).

NASPI CRSTT web page (Videos, use cases, reference documents, and call notes). Using Synchrophasor Data for Oscillation Detection Using Synchrophasor Data for Phase Angle Monitoring Using Synchrophasor Data for Voltage Stability Assessment Using Synchrophasor Data during System Islanding Events and Blackstart Restoration Using Synchrophasor Data to Diagnose Equipment Health and Misoperations EA001 - Using Synchrophasor Data to Analyze Fault Event Causes EA002 - Using Synchrophasor Data to Analyze Concurrent Fault Events EA003 - Using Synchrophasor Data to Identify a Failing Potential Transformer EA004 - Using Synchrophasor Data to Identify System Voltage Oscillations Use Case: GEN-03 – Automatic Voltage Regulator (AVR) Malfunction Use Case: GEN-05 – Nuclear Plant Voltage Oscillations

#### **Attendees**

Alex Ning Brent Blanchard Carl Benner Frank Tuffner **Greg Zweigle** Harry Grewal James Kleitsch Jared Bestebreur Joshua Wakeam Khalid Yousif Marianna Vaiman Mike Cassiadoro Nikitha Vanaparthy Slava Maslennikov Teresa Carlon Tom Rizv Yi Hu