# Control Room Solutions Task Team (CRSTT) Minutes

Co-leads, Michael Cassiadoro (mcassiadoro@totalreliabilitysolutions.com) and
Jim Kleitsch (jkleitsch@atcllc.com)
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## June 20, 2018

**Attendees – See below. Call led by Jim.**

**Action Items**

o **NDR and Mike** will take another look at updating the Phase Angle Monitoring spreadsheet and possibly update the paper in an effort to keep the CRSTT documents current. (Download the paper).
o **NDR** to check with Peak on sharing an event video – in progress. NDR will let us know when Peak is ready.
o **Tom** will reach out to Allen Goldstein (NIST) for possible coordination between the CRSTT and other organizations such as IEEE and IEC activities. Mike asked back in May 2018 how should CRSTT coordinate or work with other industry bodies (e.g. IEEE, etc.)? The reason is so that CRSTT would have a presence at those types of meetings and conferences. Tom suggested to Mike that we connect with Allen to tie into IEEE and IEC activities.
o **Mahendra** will reach out to the PRSVTT on task team collaboration during the October 2018 meeting
o **All:** Mike is looking for people willing to serve on a panel at the Oct. 2018 NASPI WG mtg. in Philly to discuss specific uses of synchrophasor technology in the control room (e.g., enhanced state estimation, oscillation detection, etc.). If you are interested, please let Mike know.

**Meeting Notes**

o NDR reported that 8/15 vendor/developer and 11/28 user responses for the "Determining Disturbance Location Survey" have been returned. Another reminder for the outstanding responses will be sent next week. First draft of report will be ready by the next conference call.
o Mahendra asserted that he would like to know what level of maturity for the use cases.
o NASPI Work Group meeting will be October 23-24, 2018 in Philly.
o CRSTT panel session at the NASPI Work Group breakout in conjunction with PRSVTT; use of synchrophasor technology in the control room. Figure out what this might mean (e.g. state estimation, etc.). Mike and Jim to decide on content and what that session may look like.
o Slava mentioned that we might want to consider a CIP discussion at a future CRSTT session as that seems to be a topic of great interest to folks trying to roll out the technology. If/when the NERC SMS publishes their findings that might prove to be interesting to go over at a high level.
o Slava also mentioned that their oscillation source detection tool might be worth discussing if/when they determine they can use it in real time.
o The CRSTT needs to decide whether or not to pursue the next focus area document – "Using Synchrophasor Data to Monitor Reactive Power Balancing." Are there other topic areas that we should take a look at?
o Video event files will still be maintained. If you would like to share an event please contact either Mike, Jim, or Teresa for assistance.

**CRSTT Goals**

o Develop a series of use case summary docs that define how grid operators and electric utilities are using synchrophasor data to provide operational value.
o 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.
o Develop a series of Lessons Learned documents related to the use of synchrophasor technology in the operations environment.

**Next conference call: July 18, 2018 at 12:30pm PT/3:30pm ET**.


**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**
Brent Blanchard
Bryn Wilson
Hermes Arevalo
James Kleitsch
Joshua Wakeam
Mahendra Patel
Sarma Nuthalapati (NDR)
Slava Maslennikov
Teresa Carlon
Tom Rizy
Yi Hu