



## Control Room Solutions Task Team (CRSTT) Minutes

Co-leads, Michael Cassiadoro ([mcassiadoro@totalreliabilitysolutions.com](mailto:mcassiadoro@totalreliabilitysolutions.com)) and  
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**February 20, 2019**

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

### Action Items

- Mike C. will contact ATC, CAISO, SCE, SDG&E and others to determine interest in developing operational use case addressing the use of synchrophasor data to monitor synchronous devices.
- Teresa Carlon to upload 1) Disturbance Location and 2) two Use Case documents to the NASPI website.
- Mike will update today's agenda as the training dates listed are incorrect.
- If you plan to attend the [NASPI Work Group meeting in San Diego](#), please register and book your hotel before the group rate expires.

### New Business

- The CRSTT would like to focus on Use Case documents. Two new ones were recently added:
  - [EA005 - Using Synchrophasor Data to Analyze HVDC and SVC Response to Events](#)
  - [EA006 - Post-Event Analysis of a Compound Event Using Synchrophasor Data](#)
- Eastern Interconnect Oscillation video on YouTube:  
<https://www.youtube.com/watch?v=xilfYKxqEDo&feature=youtu.be>

### On-going Business

- Completed and uploaded to NASPI website: [Using Synchrophasor Data to Determine Disturbance Location](#)
- Using Synchrophasor Data to Monitor Reactive Power Balancing paper remains on to-do list.
- Phase Angle Monitoring spreadsheet will get updated now that the Disturbance paper is complete.
- Continue building library of events to demonstrate value PMU data provides when analyzing abnormal events and disturbance. If your organization needs help with formatting your video, please let us know we'd be happy to help.
- Total Reliability Solutions (TRS) 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 March 31, 2019 and Operator Trainer class in June 2019 (TBD). Eric Andersen ([eric.andersen@pnnl.gov](mailto:eric.andersen@pnnl.gov)) is PNNL's point-of-contact.

### 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.
- Create additional video event files for use cases and simulated events.
- Gather operator feedback on synchrophasor applications (best practices).
- 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.

**Next conference call: March 20, 2019 at 12:30pm PT/3:30pm ET.**

### **Attendees**

Carl Benner  
James Kleitsch  
Mike Cassiadoro  
Teresa Carlon  
Tom Rzy  
Dayna Aronson  
Frank Tuffner  
Clifton Black  
Rajkumar Anumasula  
Krish Srinivasan (Radhakrishnan Srinivasan)  
Mahendra Patel

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

[NASPI CRSTT web page](#) (Videos, use cases, reference documents, and call notes).

[Using Synchrophasor Data to Determine Disturbance Location](#)  
[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](#)  
[EA005 - Using Synchrophasor Data to Analyze HVDC and SVC Response to Events](#)  
[EA006 - Post-Event Analysis of a Compound Event Using Synchrophasor Data](#)  
[Use Case: GEN-03 – Automatic Voltage Regulator \(AVR\) Malfunction](#)  
[Use Case: GEN-05 – Nuclear Plant Voltage Oscillations](#)

\* [Event Summary Table](#) – supplement to the Using Synchrophasor Data to Diagnose Equipment Health and Misoperations paper.