

**NASPI Working Group Meeting
Control Room Solutions Task Team (CRSTT)
Monthly Meeting**

Presenters: Mike Cassiadoro and Jim Kleitsch
April 20, 2016



Agenda

- I. Introductions
- II. Review March 2016 NASPI Work Group Meeting CRSTT Breakout Session Presentations
- III. Review of CRSTT Goals for 2016
- IV. Provide Status Update on CRSTT Focus Area Documents
- V. Discuss NASPI Oct. 2016 WG Mtg. Phase Angle Monitoring Technical Session
- VI. Adjourn

March 2016 CRSTT Breakout Session

Task Team break-out sessions

NASPI Control Room Solutions Task Team

- A software tool for real-time prediction of potential transient instabilities using synchrophasor measurements -- Dinesh Rangana Gurusinghe, Yaojie Cai & Dr. Athula D. Rajapakse (University of Manitoba) (15 minutes)
- Black-start restoration using phasor simulator for operator training (PSOT) – Bill Blevins (ERCOT), Saugata Biswas & Anil Jampala (GE Grid Solutions), Vahid Madani & James Barich (Pacific Gas & Electric) (15 minutes)
- Synchrophasor enabled Total Transfer Capability Determination -- Ali Daneshpooy, Rahul Anilkumar, Boza Avramovic & Dino Lelic (Quanta Technology) (15 minutes)

Additional Agenda Items:

- Finalize 2016 CRSTT Goals
- Prioritize remaining focus area documents
- Others?

CRSTT Goals for 2016

1. Prioritize and complete remaining focus area documents
2. Develop operational use case summary documents to support NASPI technical papers
3. Create additional video event files for use cases and simulated events (includes data sharing)
4. Gather operator feedback on synchrophasor applications (best practices)
 - We need to figure out who is using the data and for what so we can communicate that information and lessons learned to the larger community. (Tom Rizy)
5. Identify available training materials

Focus Area Document Updates

3. Using Synchrophasor Data for Phase Angle Monitoring – [ETC April 2016](#)
 - (Cassiadoro – TRS, Chanoski – NERC, Nuthalapati - ERCOT)
 - We shall finish up this Draft paper by end of the month and have the final one posted on our website.
 - We shall work with the leadership Team on having a Workshop at the 2016 October NASPI Meeting on Phase Angle Alarming
 - There were some video clips provided by some participants in this report. We shall try to have them in NASPI website in the video section. This will add to the list of videos that we already have on the website.

Focus Area Document Updates

(On their way to completion)

4. Enhanced State Estimation Survey – [ETC May 2016](#)
 - (Vaiman – V&R Energy, Kleitsch – ATC, Cassiadoro – TRS)
 - Alison reviewed and blessed the survey so we can move forward
 - Marianna has contacted the IEEE Cascading Failure Working group [CFWG] and they are ready to collaborate with NASPI on the survey and talk with IEEE on distributing the survey now that the survey questions are approved.

Update 4/20 - Delays due to Mr. Kleitsch not getting needed approvals to proceed. Expectation is that we'll receive those in April and issue the survey in May.

Focus Area Docs – Status Update (Cont.)

(Stalled? How do we get them started/restarted?)

5. Oscillation Detection

- (Dyer – EPG, Blevins and Rjagopalan – ERCOT, Patel - EPRI)

6. Determining Disturbance Locations

- (Dyer – EPG, Zweigle – SEL Inc., Cassiadoro – TRS)

7. Using Synchrophasor Data to Monitor Reactive Power Balancing

- (Cassiadoro - TRS, SCE –A.J, Peak RC – Zhang)

8. Establishing Operating Limits and Determining Transfer Capabilities

- *(Cassiadoro – TRS, Ali – Quanta, Viaman – V&R Energy)*

Phase Angle Monitoring Technical Session

NASPI Leadership Team is planning a Phase Angle Monitoring Technical Session for October 2016 Work Group Meeting.

Items to Discuss:

- Present Value to Real-time Ops (e.g., monitoring of specific corridors, wide-area monitoring)
- Exhibit Best Practices
- Demonstrate Training Methods

CRSTT – Primary Contacts

Name: Michael Cassiadoro

Email: mcassiadoro@totalreliabilitysolutions.com

Phone: 360-836-9008

Name: Jim Kleitsch

Email: jkleitsch@atcllc.com

Phone: 608-877-8102

Next CRSTT Conference Call: May 18, 2016