

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

Presenters: Mike Cassiadoro
March 23, 2016



Agenda

- I. Introductions
- II. NERC Synchronized Measurement Subcommittee (SMS) Update
- III. Real-Time Prediction of Potential Transient Instability Using Synchrophasor Measurements
- IV. Synchrophasor Enabled Total Transfer Capability Determination
- V. Real-Time Closed Loop Test-Bed for Synchrophasor-Based Voltage/VAR Controller
- VI. Development of Synchrophasor Use Cases
- VII. Status Update on CRSTT Focus Area Documents
- VIII. Review of CRSTT Goals for 2016
- IX. Adjourn

NERC SMS Update

NERC SMS update provided by Ryan Quint (NERC) – presentation to be posted separately on NASPI website

Breakout Session Presentations

Control Room Solutions Task Team – Room A704

- 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)
- Synchrophasor enabled Total Transfer Capability Determination -- Ali Daneshpooy, Rahul Anilkumar, Boza Avramovic & Dino Lelic (Quanta Technology) (15 minutes)
- Real-time closed-loop test-bed for a synchrophasor voltage/VAR controller – Backer Abu-Jaradeh (SCE) (15 minutes)
- CRSTT business

The above presentations will be delivered during the CRSTT breakout session and posted separately on the NASPI website.

Developing Synchrophasor Use Cases

Sarma Nuthalapati, PhD (Texas A&M University) to present PMU use case examples – presentation to be to post separately on NASPI website

Focus Area Document Updates

1. System Islanding Detection and Blackstart Restoration – Posted in June 2015

- (Kleitsch – ATC, Cassiadoro – TRS)

2. Using Synchrophasor Data for Voltage Stability Assessment – Posted in Nov. 2015

- (Farantatos – EPRI, Vaiman – V&R Energy)

3. Using Synchrophasor Data for Phase Angle Monitoring – ETC March 2016

- (Cassiadoro – TRS, Chanoski – NERC, Nuthalapati - ERCOT)
 - Final draft posted on website for review
 - Video clips provided by contributors will be posted on the NASPI website
 - CRSTT working with NASPI Leadership Team to schedule Phase Angle Monitoring Workshop for the October 2016 NASPI Work Group Meeting

Focus Area Document Updates (Cont.)

4. Enhanced State Estimation Survey – ETC March 2016

- (Vaiman – V&R Energy, Kleitsch – ATC)
- Survey will be distributed to the NASPI email distribution list and conducted using Survey Monkey
- NASPI CRSTT to collaborate and coordinate with IEEE Cascading Failure Working Group (CFWG) to distribute survey to wider audience

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)

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)
5. Identify available training materials

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Next NASPI CRSTT Conference Call: April 20, 2016

Next NASPI WG Meeting: October, 2016 in Seattle, WA