



Control Room Solutions Task Team Breakout Session Post Meeting Report Out

October 19, 2022

CRSTT Mission Statement

Our mission:

The NASPI Control Room Solution Task Team's mission is to work collectively with other NASPI task teams to advance the use of real-time synchrophasor applications for the purpose of improving control room operations and grid reliability. The CRSTT will use its experience and regional diversity to provide advice, direction, support and guidance to NASPI stakeholders and other organizations involved in the development and implementation of real-time synchrophasor applications.

CRSTT Work Plan

This team's priorities are to:

1. Work directly with grid operators and electric utilities to identify and help resolve issues that are impeding the implementation of synchrophasor-based applications in the Operations Horizon.
2. Develop documentation that defines the safety, reliability and economic benefits that synchronized measurement technology provides.
3. Recognize and share industry best practices.
4. Support the design, development and delivery of synchronized measurement application training for end users.
5. Promote operational event analysis to demonstrate the value of synchronized measurement technology.

CRSTT Work Plan (continued)

This team's goals are to:

1. Develop a series of operational use cases that define how grid operators and electric utilities can use synchronized measurement data to provide operational value.
2. Create additional video event files for use cases and simulated events.
3. Gather operator feedback on synchronized measurement applications (best practices).
4. Support the design, development and delivery of synchronized measurement-related training for operations staff.
5. Develop a series of Lessons Learned documents related to the use of synchronized measurement technology in the operations environment.
6. Draft new and update existing focus area documents as the need arises.

Manitoba Hydro Presentation

- Kevin Ostash from Manitoba Hydro discussed WAMS experiences and roadmap
 - NERC CIPify, CIPification, and CIPified
 - Use the data for commissioning, mode monitoring and analysis, support of model validation, disturbance event analysis, and monitoring and addressing stability issues
 - Phasor data utilized in EMS SCADA and State Estimator applications
 - No WAMS department so many groups supporting development requiring tight coordination. Internal WAMS Steering Committee and WAMS Working group
 - WAMS Roadmap High level – Platform / Participation / Applications

SPP Presentation

- Mike Nugent from SPP discussed monitoring data quality and availability
 - Common challenges
 - Monitoring SPP's PMU System
 - Monitoring data flow from remote data providers
 - Monitoring and addressing data quality
 - Grafana dashboarding & InfluxDB

CRSTT Business

- Jim Kleitsch from ATC did a brief overview of the NERC SMWG oscillation request process to provide awareness
- CRSTT business (Jim, Cody, Mike)
 - Review Mission Statement – No changes identified
 - Performed a high level review of the CRSTT work plan for 2022/2023

Potential Future Topics/Work Plan Items

- Building operator trust and confidence in applications
- Improving data quality to make the data usable and trustable
- Best practices & experiences around Operator Training
- Best practices around HMI, making the tools intuitive
- Integrating PMU data with existing tools/displays
- “Show and Tell” sessions

More Potential Future Topics/Work Plan Items

- Develop a list of hurdles to PMU-based tools in the control room. Pick off the ones we can address as a group and communicate that information.
 - Identifying relevant use cases
 - Operations buy in
 - Corporate buy in
 - Training requirements
- CIP Experiences
 - Not a “how-to” document
 - Consider pulling together information from those who have successfully implemented to show others some of the options available to meet compliance
 - Not a compliance document but something to help scope the options available

Other Discussions

- Value proposition specifically for Operations. Backup state estimator, LSE, etc.. (MHEB just went through this)
- What's needed for Operator Displays? We had a workshop on this years ago. Something we should look at again?
- Ask operations what problems they need solved and then provide solutions if available. This could be an input for researchers. Perhaps issuing a survey?
- Literature review to make it easier for people to find what they're looking for (NASPI action item)
- Update library of applications so people understand what's available now and what gaps exist that they might be able to fill (NASPI action item?)

CRSTT – Primary Contacts

- Co-Lead: Cody Parker
- Email: CParker@SPP.org , Phone: 501-614-3297

- Co-Lead: Jim Kleitsch
- Email: jkleitsch@atcllc.com, Phone: 608-877-8102

- Backup: Mike Nugent
- Email: mnugent@spp.org, Phone: 501-519-5238

- If you want to be added to the CRSTT or DisTT email list or have questions about the NASPI website please contact teresa.carlon@pnnl.gov