Control Room Solutions Task Team (CRSTT) Minutes

Co-leads, Michael Cassiadoro (mcassiadoro@totalreliabilitysolutions.com) and
Jim Kleitsch (jkleitsch@atcllc.com)
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January 17, 2018

Attendees – See below. Call led by Mike Cassiadoro.

Action Items

- Oscillation Detection paper will be submitted to the NASPI Leadership on January 19 for comment.
- Marianna will be working on Using Synchrophasor Data to Monitor Reactive Power Balancing paper. If you would like to join in this effort please let Mike and/or Jim know.
- NDR offered to help with the Determining Disturbance Locations paper. If you would like to join in this effort please let Mike and/or Jim know.
- NDR and Mike will take another look at updating the Phase Angle Monitoring spreadsheet and maybe the paper in an effort to keep the CRSTT documents current. (Download the paper).
- NDR to check with Peak on sharing an event video.
- Teresa to post link to Use Case Document spreadsheet: http://www.naspi.org/sites/default/files/reference_documents/13.pdf
- **NASPI awards are due March 2**. Form and more information can be found here: https://www.naspi.org/node/693

Meeting Notes

- Focus Area Documents have been in progress for about three years. The first 3 on the list have been completed and posted on the NASPI web site.
  - Enhanced State Estimation Survey – the survey was completed in lieu of the Enhanced State Estimation paper, survey results were received and a preliminary report was prepared. CRSTT felt that some responders might not have fully understood the questions and therefore further analysis of data is needed. Unsure if paper will be completed at this point.
  - Oscillation Detection – paper has been completed, paper will be submitted to the NASPI Leadership for their review and comment on January 19, after their review the paper will then be posted on the NASPI website.
  - Determining Disturbance Locations – NDR offered to volunteer with this effort.
  - Using Synchrophasor Data to Monitor Reactive Power Balancing – Marianna has volunteered to help in this area.

- Slava asserted that based on the name of the task team we should be focusing on applications related to control room, but some of applications look like general applications and not specific to control room. Papers 2-3 are excellent papers but if the team is to focus on the applications in the control room we need to follow this development, paper 5 type of paper looks like situational awareness, how is the control room going to use this information…by education, all the papers should have the premise “how is this information going to be used in the control room?” What is the objective of each paper? What new is coming from PMU? What is the objective of the application?

Needs to be clearly defined.
We need not to just publish papers and then forget about them. For example, the voltage stability document probably needs to be updated.

- Phase Angle Monitoring paper; has a nice spreadsheet summary, time to get a second version updated. Teresa can post on the CRSTT web page. We can then reassess if we are making our mark on keeping these documents updated.
- Video Event files (see references below) – on the CRSTT web page. CRSTT would like to continue building the library of events to demonstrate value PMU data provides when analyzing abnormal events and disturbances. NDR might have one to contribute (Peak). Challenges is that some people are not willing or able to share information. CRSTT discussed using a simulator to create events to show what might happen on a PMU. If you can share an event please let us know. We will sanitize the data/branding prior to posting.
- Use Case Documents – files exists that summarizes the use cases for those that won't read the full document. Use case takes a specific event and describes the entities involved, here is what occurred, here is what they did with the PMU data and here is the value it provided.
- Guidelines for improving the use cases. What is the next step for the control room? The answer should be the objective of the use case documents. This would help improve the documents. Guidelines for the future. What needs to be done to make the use case robust and reliable for the future?
- Comment, create a repository for test specification used in the control room today. We've done this for applications used in focus area documents. Tom Rizy asked if we should be talking about strength and weaknesses of applications? Any standards that we should be focusing on?
- Repository applications.
- Brief presentation on SMS at CRSTT breakout.
- Marianna's update via email "IEEE PES Cascading Failure Working Group jointly with NAPSI and NERC applied for a panel session at the upcoming IEEE T&D Meeting. Panel session "Using Synchrophasors to Improve Bulk Power System Reliability and Resiliency in North America" was approved."
- Slava suggested we look into how best practices could be improved.

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.

Reference Documents

NASPI CRSTT web site (Videos, use cases, reference documents, and call notes).
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

Next Conference Call: February 21, 2018 at 12:30pm PT/3:30pm ET.

Attendees

Anurag Srivastava
Bill O'Brien
Chandan Kumar
Christopher Sharp
Evan Phillips
Frank Tuffner
Harry Grewal
James Kleitsch
James Vikinsalo
Khalid Yousif
Mike Cassiadoro
Scott Woodbury
Slava Maslennikov
Teresa Carlon
Tom Rizy
Xiaochuan Luo
Yi Hu
Yousu Chen
Subburaman Sankaran