

EATT Synchrophasor Protection White Paper Task Force

Kickoff meeting

Meeting Minutes

April 14, 2015

Opening

The kickoff meeting of the Synchrophasor Protection White Paper Task Force began at 0815 am PST with introductions of the volunteer Task Force members and a general description of the project. The purpose stated was to develop a Synchrophasor Protection White Paper to collect existing research on Utility, R&D and industry paper applications of Synchrophasor data for system protection purposes. This data will be related to the associated relay protection system architecture (Transmission line, Microgrids, RAS schemes, etc.) to provide a focused analysis of possibilities for future innovations. The overall goal of this paper is to provide a driving force for the development of Synchrophasor protection applications and present the vision of NASPI for Synchrophasor protection.

Present

Mehmet Cintuglu

Prashant Palayam

Evangelos Faratatos

Tania Mutmainna

Eric Chan (in place of Yilu Liu)

Wei-Jen Lee

Deepak Konka

Bharat Bhargava

Dawei Fan

Kris Koellner

Teresa Carlon

Matthew Rhodes

New Business

- The due date for the report is the NASPI WG conference on October 14th and 15th.
- A tentative paper rough draft date was suggested and agreed upon for August 14th.
- All future meetings will be once a month except for the next one to kick-off the research assignments.
- Overview of the research outline provided suggestions for focus and additions to the scope of research.
 - A point was made that the PSRC, and possibly other entities, have published existing papers on Synchrophasor protection applications. It was agreed that this should be a point of research and a section in the final report, possibly in the introduction.
 - Two inhibitors to the proliferation of Synchrophasor technology were discussed as needing their own sections in the report (the introduction, again, makes the most sense):
 - Response time of Synchrophasors
 - Cyber Security of Synchrophasor data used for live system protection.
 - Security of Synchrophasor data
 - Security of trip signal paths (possibly send trip signals through the SCADA system)
- An application of Synchrophasors was discussed as being used in California for RAS applications (Could possibly be BPA?)
- It was discussed that protection systems with Synchrophasors could only be used for backup protection at this time do to the latency of trip signals. It was suggested that this paper be focused on backup protection. Since this topic will come up in the research, I believed it was important to focus the paper on all protection applications of Synchrophasors regardless of the use in the system.
- A suggestion was made and agreed upon that a section of the paper should be devoted to the offline applications of Synchrophasors for monitoring and analysis.
- The Utility and R&D surveys were reviewed and revisions were made to the Utility survey.
- It was suggested that the surveys be distributed through the NASPI WG mailing list as most utilities and R&D organizations are already that list. It was suggested that the Texas A&M relay conference has a distribution list that could also be

utilized. Discussion will continue at the next meeting as to how the surveys will be distributed.

- A preliminary request for volunteers for the industry paper research was delivered, but no volunteers at this time.

Action Items for Next Meeting

- Revision of research outline and surveys – Matthew Rhodes
- Review of PSRC report on Synchrophasor protection applications – All members
- Review of Utility and R&D surveys – All members

Agenda for Next Meeting

The next meeting will be held on Monday May 4, 2015. Items for the agenda:

- Finalize research outline
- Assign research responsibilities
- Finalize surveys and distribute surveys

Adjournment

Meeting was adjourned at 9:45 by Matthew Rhodes. The next general meeting will be at 0800pst on May 4, 2015.