

Control Room Solutions Task Team Work Plan

April 2021



Background

The North American Synchrophasor Initiative (NASPI) is a collaborative effort between the U.S. Department of Energy, North American Electric Reliability Corporation (NERC), and electric utilities, vendors, consultants, federal and private researchers, and academics. The NASPI mission is to improve power system reliability and visibility through wide area measurement and control. The NASPI community is working to advance the deployment and use of networked phasor measurement devices, phasor data-sharing, applications development and use, and research and analysis. Important applications today include wide-area monitoring, real-time operations, power system planning, and forensic analysis of grid disturbances.

The NASPI Control Room Solutions Task Team (CRSTT) is one of five task teams formed by the NASPI community to help advance the deployment and use of networked phasor measurement devices, phasor data-sharing, applications development and use, and research and analysis.

An overview of the NASPI Work Group structure is provided below.





1 Introduction

This document defines the CRSTT's mission, priorities and goals, and planned activities for 2021.

The CRSTT will review and update this plan annually to ensure a common understanding of the team's purpose and direction.

2 Mission Statement

This task team's mission is to work collectively with other NASPI task teams to advance the use of real-time synchronized measurements for the purpose of improving control room operations and grid reliability. This team will utilize 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 synchronized measurement applications.

3 Priorities and Goals

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.

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 measurementrelated 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.

4 Planned Activities

This task team's planned activities are as follows:

4.1 Use Case Summary Documents

CRSTT members will work with grid operators, electric utilities, vendors and research institutions to develop operational use cases that demonstrate the various ways in which synchronized measurement data is being used to provide operational value.

4.2 Video Event Library

CRSTT members will continue working with grid operators, electric utilities and vendors to build a library of video events that demonstrate the value synchronized measurement data provides when analyzing events that impact the electric power system. Existing videos are posted on the CRSTT page of the NASPI website.

4.3 Focus Area Documents

CRSTT members will continue to draft new focus area documents and update existing documents as the need arises. The most recent version of each completed paper can be found on the CRSTT page of the NASPI website.

4.4 Industry Outreach

The CRSTT will continue to coordinate with other NASPI task teams and industry bodies to advance the deployment and use of this new technology and help gain user acceptance of synchronized measurement applications.

CRSTT will focus its efforts on coordinating and forging working relationships with the NERC Operating Reliability Subcommittee (ORS), NERC Synchronized Measurement Working Group (SMWG), WECC Joint Synchronized Information Subcommittee (JSIS), the PMU Subgroup of the IEEE Power & Energy Society (PES) Cascading Failure Working Group (CFWG), and each of the Independent System Operators (ISO) and Regional Transmission Organizations (RTO) functioning within North America.