

Call for Abstracts

NASPI Work Group Meeting

Tempe, Arizona

April 4-5, 2023

The next North American SynchroPhasor Initiative (NASPI) Work Group meeting will be held in Tempe, Arizona, April 4-5, 2023. We invite members of the broad synchrophasor community to submit abstracts to be considered for presentation at the meeting. We are particularly interested in receiving abstracts that showcase innovative and novel applications of synchrophasor technology, to solve operational or planning electric power reliability and resilience challenges.

Current and emerging areas of emphasis/focus for NASPI are:

- Networking and communications technologies (advanced architectures),
- Statistical analysis and deep learning for extracting actionable information from large datasets, and
- High-resolution sensors to characterize the transient behavior of inverter-based resources and other fast-acting phenomena.

Key topics of interest include:

- The use of PMUs for use in distribution applications,
- Utilizing synchronized measurements for wildfire mitigation (or other natural disasters),
- How synchrophasor technology influences resilience planning, including monitoring for equipment failure, etc., and
- Studies to better understand ambient data (noise) to characterize system health and anomalies.

Detailed Abstract Submission Instructions

NASPI will not require submittal of papers; individuals who wish to present at the Work Group meeting should email an abstract (using the submittal information listed below) to naspi@pnnl.gov no later than **January 27, 2023**. The NASPI Leadership Team will review the submissions to determine which presentations will be selected. Based on the number of abstracts submitted in each of the technical areas of interest, the NASPI Leadership Team may also invite abstract submitters to participate in the poster session. The poster session will be hosted during the NASPI reception April 4. We will notify all abstract submitters of their acceptance no later than **February 22, 2023**. Questions about the call for abstracts can be emailed to naspi@pnnl.gov.

By submitting an abstract and later providing a presentation at the meeting, the submitter grants NASPI permission to publicly post the presentation and share their name, affiliation and email through on-line posting on the NASPI website following the meeting.

**** ABSTRACT SUBMITTAL INFORMATION ****

- Responsible author's name, affiliation, and contact information (email and phone number):
- Additional author's name(s), affiliation, and contact information (email and phone number):
- Will any presenters need assistance with a visa to enter the United States?
- Title of proposed presentation and area of interest:
- Summary of proposed presentation (1-3 paragraphs):
- Statement of novelty or impact, answering the question why would the NASPI community benefit from receiving this presentation? (1 paragraph):

Topics of interest include but are not limited to:

- The use of real-time synchrophasor applications for the purpose of improving control room operations and grid reliability.
- Experience with synchrophasor data networking, architecture, archiving, and other supporting technologies.
- Advances in adopting synchrophasor technology adoption through standardization, testing, or other technological accomplishments.
- Extracting actionable information from synchrophasor data to support either real-time or engineering applications.
- The application and utilization of distribution state estimation.
- Benefits of and key success factors in deploying synchronized measurement in distribution systems.
- High-speed waveform measurements that augment traditional synchrophasor measurements for additional resolution of high-speed phenomena, including the behavior of inverter based resources.
- Oscillation mitigation, including specifically inverter-based resources.
- Understanding measurement uncertainty relating to power system oscillation mitigation.
- Incorporating advanced sensors into measurement infrastructure, including mixing different types of measurements and using heterogeneous measurements to make decisions.
- Visualization and human factors, including cognitive systems engineering, decision support, and human-machine interfaces.
- Training challenges utilities are facing in deploying advanced technology in the control room
- Any other novel and timely topics related to wide-area time-synchronized measurements that would be of interest to the broader NASPI community.