



NASPI Work Group Meeting and Vendor Show

PERA Club

1 E Continental Drive Tempe, Arizona, 85281

April 4-5, 2023 (In Person)

The North American SynchroPhasor Initiative (NASPI) Work Group Meeting and Vendor Show will be held in Tempe, Arizona, April 4-5, 2023, at the beautiful PERA Club. Our agenda will feature invited speakers and technology partners demonstrating their latest hardware and software. There are presentations from companies and individuals who have deployed, or are exploring emerging, applications associated with time-synchronized measurements.

Our distinguished **keynote speaker** is Chris Janick, Salt River Project (SRP) Senior Director of Power Delivery.

NASPI will also be hosting a poster session along with the reception the evening of April 4, 2023.

Registration is **open!** Our early bird registration fee is \$590 for regular attendees and \$100 for students. **After March 17, 2023**, those rates will increase to \$690 for regular attendees and \$175 for students. **Early bird registration ends on March 17, 2023.**

Hotels: NASPI does not have a room block, please use this [list](#) to make your own reservations.

NASPI Partners: NASPI is very much looking forward to having our Partners present at NASPI. We have set aside space at the PERA Club for your setup and will be offering an opportunity or you to feature your technologies to NASPI participants as indicated in our Partnership [document](#). In addition, you will be invited to provide a 5-minute flash talk before the breakout sessions on Tuesday. Please review the partnership levels and make your choice regarding which package works best for your organization.

Draft Agenda (3/13/23)

Tuesday, April 4, 2024 (Local Time)	
8:00 - 9:00 am	Registration and coffee
9:00 - 9:05 am	Welcome, Introductions, and Logistics Review: Jeff Dagle (PNNL)
9:05 - 9:25 am	Keynote Speaker: Chris Janick, SRP Senior Director of Power Delivery
9:25 – 9:45 am	NASPI Update – Jeff Dagle (Pacific Northwest National Laboratory)
9:45 – 10:05 am	Financial Impact of High-Resolution Telemetry on the Clean Energy Transition - Kevin Jones (Dominion Energy)
10:05 – 10:25 am	Observed challenges specific to distribution grid synchrophasor deployments from a Distribution System Operations perspective - Bryce Johanneck (Quanta Technology, LLC)
10:25 – 10:45 am	Categorizing and Understanding the State of Applications Driven by Time-Synchronized Grid Data - Sean Murphy (PingThings, Inc.)
10:45 - 11:10 am	Break – 15 Minutes
11:10 - 11:30 am	Interaction of Forced Oscillation with Multiple System Modes - Mani Venkatasubramanian (Washington State University)
	American-Made Utility Digital Transformation Prize Session Hosted by Sandra Jenkins, U.S. Department of Energy
11:30– 12:00 pm	<ul style="list-style-type: none"> Phase 1 Outcomes Utility partner Discussions

	<ul style="list-style-type: none"> • Video • Phase 2 Next Steps
12:00 – 1:00 pm	Lunch
	Inverter-Based-Resources Super Session
1:00 – 1:20 pm	Monitoring Momentary Cessation of IBRs with Synchrophasors - Tariq Rahman (San Diego Gas & Electric)
1:20 – 1:40 pm	Modeling Dynamic Response of Inverter-Based Resources Using Waveform Measurements - Hamed Mohsenian-Rad (University of California)
1:40 – 2:00 pm	Measurements and Analytics for Resilient Integration of Inverter-Based Resources - Jim Follum (Pacific Northwest National Laboratory)
	Technology Partner Flash talks (5 minutes talk)
2:00 – 2:40 pm	<ul style="list-style-type: none"> • PingThings • Oscilloquartz • Vendor 3 • Vendor 4 • Vendor 5 • Vendor 6 • Vendor 7 • Vendor 8
2:40 – 3:00 pm	Break – 20 Minutes
	Task Team Breakout Sessions
3:00 – 5:00 pm	Control Room Solutions Task Team (CRSTT) - James Kleitsch and Cody Parker
	Data & Network Management Task Team (DMTT) - Dan Brancaccio
	Distribution Task Team (DisTT) - Dan Dietmeyer and Panos Moutis
	Engineering Analysis Task Team (EATT) - Evangelos Farantatos and Matthew Rhodes <ul style="list-style-type: none"> • The Grid Event Signature Library: A Centralized Repository of Power System Waveform Data - Aaron Wilson (Oak Ridge National Laboratory) and Jhi-Young Joo (Lawrence Livermore National Laboratory) • The Use of High-Speed Synchronized Measurements to Create Dynamic Indicators of Grid Resilience - David A. Schoenwald (Sandia National Laboratory)
5:00 - 7:30 pm	NASPI Reception, Vender Show, & Poster Session

Wednesday, April 5, 2023 (Local Time)	
8:00 - 9:00 am	Registration and coffee
	NASPI Task Team Updates (10 minutes each) Panel Session
9:00 – 9:50 am	<ul style="list-style-type: none"> • CRSTT - James Kleitsch and Cody Parker • DNMTT - Dan Brancaccio • DisTT - Dan Dietmeyer and Panos Moutis • EATT - Evangelos Farantatos and Matthew Rhodes
	Organization Updates (10 minutes each)
9:50 – 10:20 am	<ul style="list-style-type: none"> • IEEE - Yi Hu • NERC SMWG - Clifton Black • EIDSN - TBD
10:20-10:40	Break – 20 minutes
	Practical Applications of Synchrophasor Technology

10:40 – 11:00am	AEP's Experience in Configuring and Deploying Linear State Estimator to Enhance Grid Resilience - Yidan Lu (American Electric Power)
11:00 – 11:20 am	Tracking Periodic Voltage Sags via Synchrophasor Data in a Geographically Bounded Service Territory - Luigi Vanfretti (Dominion Energy)
	Streaming Telemetry Transport Protocol (STTP)
11:20 – 12:00pm	The new IEEE Standard for the Streaming Telemetry Transport Protocol (STTP) - Session moderated by Christoph Lackner (Grid Protection Alliance)
12:00 - 1:00 pm	Lunch – 1 hour
	Data Quality
1:00 – 1:20 pm	Synchrophaser system data quality - Can we do better? - Yi Hu (Quanta Technology, LLC)
	Advanced Applications
1:20 – 1:40 pm	Localizing and Mitigating Delayed Voltage Recovery in Distribution Systems via DER & Load Control - Amarsagar Reddy Ramapuram Matavalam (Arizona State University)
1:40 – 2:00 pm	Fault Location using Realistic PMU data: Physics-Informed Machine Learning for enhancing robustness and verification - Wenting Li (Los Alamos National Laboratory)
2:00 – 2:20 pm	Designing Model-Free Time Derivatives in the Frequency Domain for Ambient PMU Data Applications - Luigi Vanfretti (Dominion Energy)
2:20 – 2:40 pm	Break 20 minutes
	Inertia Estimation
2:40 – 3:00 pm	Real-Time Inertia Estimation Monitor Based on Pumped Hydro Operation Signatures - Yilu Liu (University of Tennessee)
3:00 – 3:20 pm	Assessment of Inertia Using PMU Data for Indian Power System - Male Pradeep Reddy (Grid Controller of India Limited)
	Visualization and Operator Training
3:20 – 3:40 pm	Visualizing PMU data for the end-user: A human factors approach - Mary Ngo (Pacific Science and Engineering Group)
3:40 – 4:00 pm	Dynamic Synchrophasor Simulator for Real-Time Operator Training - Arthur Mouco (Brazilian Independent System Operator – ONS)
4:00 – 4:30 pm	Closing remarks, open discussion, next steps – moderated by Jeff Dagle
4:30pm	Adjourn

NASPI would like to say **“THANK YOU”** to the following partners for their support

