NASPI North American SynchroPhasor Initiative

NASPI Work Group Meeting and Vendor Show
Radisson Hotel Salt Lake City Downtown
215 West South Temple Street
Salt Lake City, Utah, 84101
April 16-17, 2024 (In Person)

The North American SynchroPhasor Initiative (NASPI) Work Group Meeting and Vendor Show will be held in Salt Lake City, Utah, April 16-17, 2024, at the beautiful Raddison Hotel Salt Lake City Downtown. Our agenda features 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 Branden Sudduth, Western Electricity Coordinating Council (WECC) Vice President, Reliability Planning and Performance Analysis.

April 17, 2024, there will be a NASPI-NERC Synchrophasor Data Analytics Workshop organized by Jim Follum (PNNL). If you are wanting to attend just this workshop, there is no charge. When you register, select the option for just the workshop, please follow the instructions and let us know if you have any questions. For those of you who will be attending the whole meeting, you will see the workshop as a selection when you register. Please let me know if you have any questions.

Registration is Open! The registration fee is $690 for regular attendees and $175 for students.

EPRI has a block of rooms for this event. Please use this link to secure your room. Cutoff date for room block is March 27th. If you have any issues making reservation, please email naspi@pnnl.gov.

Draft Agenda (04/09/24)

Tuesday, April 16, 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: Branden Sudduth, WECC Vice President, Reliability Planning and Performance Analysis
9:25 – 9:40 am	NASPI Update – Jim Follum (PNNL)
	Session 1 Linear State Estimation
9:40 – 10:00 am	Update on PMU-based Power Network Analysis Applications at SDG&E – Robin Manuguid (SDG&E) and Marianna Vaiman (V&R Energy)
10:00 – 10:20 am	Linear State Estimation for Improving Grid Reliability and Resiliency at TVA - Neeraj Nayak (Electric Power Group) and Jonathan Sides (TVA)
10:20 – 10:40 am	Machine Learning Based State Estimation for PMU-Unobservable Transmission Systems – TVA Case Study – Evangelos Farantatos (Electric Power Research Institute)
10:40 - 11:00 am	**Break – 20 Minutes**
	Session 2 Modeling and Monitoring Generation Resources
11:00 - 11:20 am	Analysis of Oscillation in RE Complex of Indian Power System – Raj Kumar Anumasula (Grid Controller of India Limited)
11:20 - 11:40 am	Validation of IBR equivalent plant level PSCAD model using Synchrophasor measurements – Srinivas Chitturi (Grid Controller of India Limited)
11:40 - 12:00 pm	Field Demonstration of an Automated Generator Evaluation Tool at BPA – Jim Follum (PNNL), Priya Mana (PNNL), and Elliott Mitchell-Colgan (BPA)
12:00 – 1:00 pm	**Lunch**

	Session 3 Synchronized Waveforms in the Distribution System
1:00 – 1:20 pm	Continuous (Gapless) Recording of Synchro waveforms: Field Experiments and Case Studies– Hamed Mohsenian-Rad (University of California, Riverside)
1:20 – 1:40 pm	Platform Enabling Smart Grid Monitoring & Sensing- Scott L. Caruso (Gridmetrics), and Ryan Quint (Elevate Energy)
1:40 – 2:00 pm	Case Study of Building Loads Using Continuous Time-Synchronized Waveform Measurements – Jared Bestebreur (Schweitzer Engineering Laboratories, Inc.)
	American-Made Challenge
2:00 – 2:10 pm	Digitizing Utilities Prize Round 2 – Sandra Jenkins (DOE)
	Session 4 Technology Partner Flash talks (5 minutes talk)
2:10 – 3:10 pm	- MathWorks - Graham Dudgeon - Schweitzer Engineering Laboratories - Data Society - Grid Protection Alliance - Meinberg - Oscilloquartz – Daniel Burch - Powerside - STER - Dalibor Brnobić - PingThings - V&R Energy - Marianna Vaiman - GE Vernova – Kyle Ryan
3:10 – 3:30 pm	**Break – 20 Minutes**
	Session 4 Task Team Breakout Sessions
3:30 – 5:00 pm	Control Room Solutions Task Team (CRSTT) - James Kleitsch and Mike Nugent
	Data & Network Management Task Team (DNMTT) - Dan Brancaccio
	Distribution Task Team (DisTT) - Dan Dietmeyer and Panos Moutis
	Engineering Analysis Task Team (EATT) - Evangelos Farantatos and Matthew Rhodes
5:00 - 7:00 pm	**NASPI Reception, Vender Show, & Poster Session**

	Wednesday, April 17, 2024 (Local Time)
8:00 - 9:00 am	**Registration and coffee**
	Session 5 NASPI Task Team Updates (10 minutes each) Panel Session
9:00 – 9:45 am	- CRSTT - James Kleitsch and Mike Nugent - DNMTT - Dan Brancaccio - DisTT - Dan Dietmeyer and Panos Moutis - EATT - Matthew Rhodes
	Session 6 Organization Updates (10 minutes each)
9:45 – 10:20 am	- IEEE PSRC- Yi Hu - IEEE PES Task Force on Synchro-Waveforms - Hamed Mohsenian-Rad - NERC SMWG - Qiang "Frankie" Zhang
10:20 – 10:40	**Break – 20 minutes**
	Session 7 Control Room Experience and Applications
10:40 – 11:00am	BPA Use of Synchrophasors in the Control Room – Daniel Goodrich, and Kliff Hopson (Bonneville Power Administration)
11:00 – 11:20 am	Dominion Energy's Synchrophasor-Based Energy Management System Project – Synchrophasor Power Flow - Horacio Silva Saravia (Electric Power Group), Abigail Till (Dominion Energy)
11:20 – 11:40 pm	Real-Time Dynamic Security Assessment of Bulk Power Exchange in the Brazilian Interconnected System Using PMUs – Arthur Mouco (Operador Nacional do Sistema Eletrico)
11:40-12:00 pm	Bridging the Gap – Synchrophasor Technology in Realizing the Smart Grid - Qiang "Frankie" Zhang (ISO New England)
12:00 – 1:00 pm	**Lunch – 1 hour**
	Session 8 Inertia Estimation and Monitoring

1:00 - 1:20 pm	Inertia Estimation Using Ambient and Probing Based PMU Measurement – Yilu Liu (University of Tennessee)
1:20 – 1:40 pm	Automatic Inertia Monitoring and Data Logging System – Azizul Hilmi Zulkifli (Tenaga Nasional Berhad, Malaysia)
	Session 9 Data Management and Sharing
1:40 – 2:00 pm	RTDMS CIM Integration at NYISO – Dan Ilse (NYISO) and Frank Carrera (Electric Power Group)
2:00 – 2:20 pm	Continuous Oscillography Waveforms from the Substation to the Cloud – TJ Purcell (Dominion Energy)
2:20 – 2:40 pm	Utility Data Sharing Risk and Economics Assessment Framework – Fleur De Peralta (PNNL)
2:40 – 3:00 pm	**Break - 20 minutes**
	NASPI-NERC Synchrophasor Data Analytics Workshop
3:00 – 4:45 pm	• Automatically Discerning Power System Dynamics in Synchrophasor Measurements Data Spectra - Chetan Mishra (Dominion Energy) • Identifying Faults in Large PMU Data-sets Using MATLAB - Mil Shastri (MathWorks) • Grid Performance Assessment using Synchrophasor Data Analytics - Neeraj Nayak (Electric Power Group) • Use Cases for Big Synchrophasor Data in Asset Health Analysis - Ritchie Carroll (Grid Protection Alliance)
4:45pm	Closing remarks, open discussion, next steps – moderated by Jim Follum
5:00 pm	**Adjourn**

NASPI would like to say **"THANK YOU"** to the following partners for their support.

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