

D&NMTT

Virtual Breakout Session 2026-07-08

Dan Brancaccio

Executive Advisor Danovo Energy Solutions

dbrancaccio@danovoenergy.com



Agenda

9:00-9:05 Welcome and Meeting Objectives

9:05-9:15 NASPI Update - Jim Follum, PNNL

9:15-9:25 D&NMTT Updates and Prior Action Items

9:25-9:40 Current Utility Data and Network Management Challenges

9:40-10:00 Oscillation Detection and PMU Reporting Effects - Dr. Farrokh Aminifar

10:00-10:12 Key Technical Themes for 2026-2027

10:12-10:24 Data Governance, Metadata, and Interoperability

10:24-10:36 Operational Use Cases and Application Readiness

10:36-10:47 2026 Work Products: Discussion, Shortlist, and Prioritization

10:47-10:50 Next Steps and Closing

Welcome and Meeting Objectives (9:00-9:05)

Review the purpose of the meeting

Confirm desired outcomes for the session

Introduce new participants and organizations

Set expectations for discussion and work product selection

NASPI Update (9:05-9:15)

Presenter: Jim Follum, PNNL

NASPI leadership and program updates

Recent NASPI activities and upcoming events

Items of interest to the D&NMTT community

D&NMTT Updates and Prior Action Items (9:15-9:25)

Identify task team coordination needs e.g., any additional calls

Confirm near-term priorities for the task team

- Meta Data
- Starter Kit

Current Utility Data and Network Management Challenges (9:25-9:40)

PMU data quality and availability issues

Lessons learned from deployments and architecture changes

Naming convention problems and operational impacts

Data gaps between field devices, control centers, ISOs, and neighboring utilities

Historian, PDC, and WAMS data alignment issues

Technical Presentation: Oscillation Detection and PMU Reporting Effects (9:40-10:00)

Presenter: Dr. Farrokh Aminifar

Oscillation detection issues and limitations using PMU data

How PMU reporting rates affect observable oscillation content

Filtering and attenuation of higher-frequency oscillations

Implications for sub-synchronous and higher-frequency oscillation detection

Application configuration, testing, and interpretation considerations

Key Technical Themes for 2026-2027 (10:00-10:12)

Data availability as a prerequisite for synchrophasor applications

Synchrophasor data for IBR-related stability monitoring

PMU and signal naming conventions for operational use

Best-of-data selection and redundant architecture approaches

Cybersecurity, firewalls, and C37.118 data sharing

Management of PMU data across lab, test, and production environments

Data Governance, Metadata, and Interoperability (10:12-10:24)

Minimum metadata needed to make PMU data usable

Recommended registry fields for PMUs, signals, stations, assets, and owners

Alignment across utility registries, openHistorian, openPDC, PI, EMS, and WAMS applications

Ownership and change control for PMU names, signal names, and routing

Data lineage from PMU to PDC to historian to application

Operational Use Cases and Application Readiness (10:24-10:36)

What makes synchrophasor data operationally trustworthy

Data requirements for oscillation detection

Data requirements for IBR monitoring and large-load studies

Data requirements for post-event analysis and dynamic model validation

Validation of application results before operator adoption

2026 Work Products: Discussion, Shortlist, and Prioritization (10:36-10:47)

PMU Data Naming and Metadata Guideline

Synchrophasor Data Quality and Availability Metrics

Reference Architecture for Redundant PMU Data Paths

Guidance for Sharing PMU Data with ISOs and Neighboring Utilities

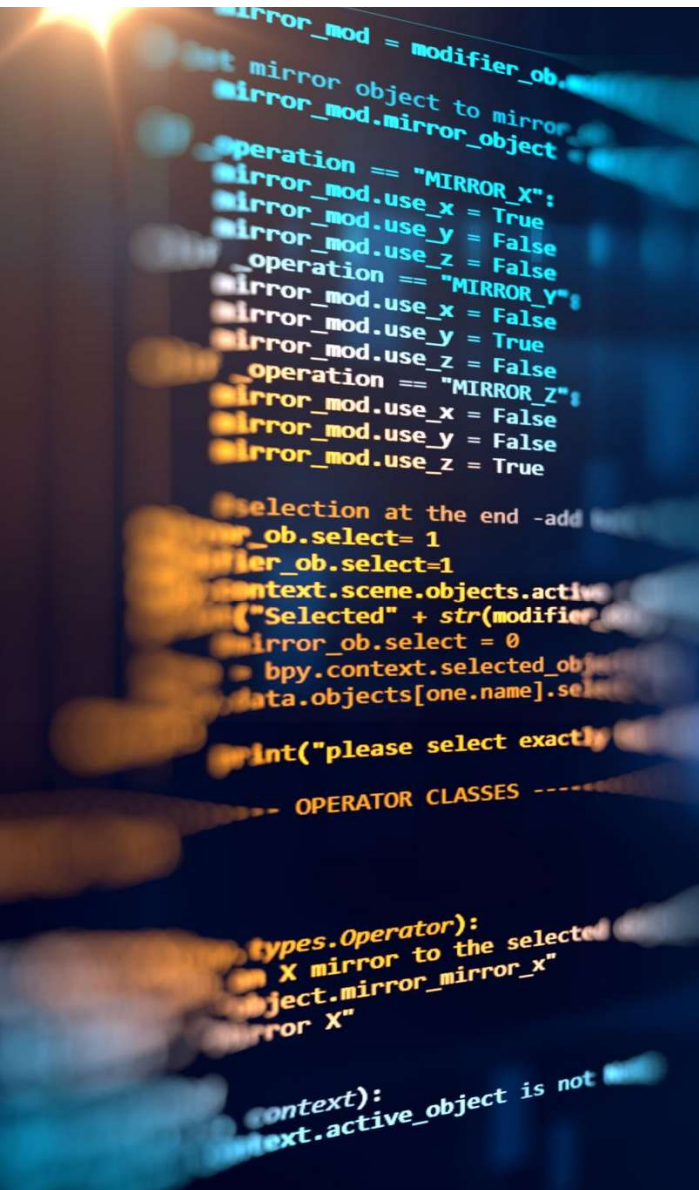
Recommended Practices for PMU Registry and Signal Management

Checklist for Deploying Oscillation Detection Applications

Data Requirements for IBR Monitoring Using Synchrophasors

Lab-to-Production Validation Guide for WAMS Applications

Guidance on PMU Reporting Rates, Filtering, and Oscillation Detection Limits



Discussion Topics / Work topics

Sample rate vs Report Rate

Frequency measurements

Definition of terms

Database performance

Network recommendations

PTP at data and control centers

END

Next Steps and Closing (10:47-10:50)

Summarize decisions made

Confirm action items and owners

Confirm schedule for next meeting

Close meeting

Network Architecture

Wide Area

Field Networks

Control Center

Corporate

Redundant Systems

Field Devices

Network

Archive

Active-Active

Fail over

Best Practices

Cloud

Lessons learned

Security concerns

Costs

Use cases

Root cause analysis

Time stamp issues from GPS

Questionnaire

Archive Strategies

NERC CIP 15-minute decisions

Redundancy

Cloud

Data Sharing