



North America SynchroPhasor Initiative (NASPI)

Jeff Dagle (PNNL)
Ali Ghassemian (DOE)

April 15 – 17, 2019

DOE's New Point of Contact

Ali Ghassemlian



Phil Overholt





Ali Ghassemian Ph.D., EE

Ali is the Program Manager for the Advanced Grid Modeling Program in the Office of Electricity at the Department Of Energy. Ali has over 22 years of experience in the Electric Power Industry. His areas of interest include power system operation and planning; reliability & resiliency analysis; state estimation; dynamic stability analysis and control; parallel processing; optimization; synchrophasor technology; and microgrids. He is a graduate of University of Maryland at College Park and Virginia Tech.

North American Synchrophasor Initiative (NASPI)

- DOE co-sponsors NASPI with EPRI (formerly, DOE co-sponsored NASPI with NERC)
- A principal function of NASPI has been to support rapid, industry-led deployment of synchrophasor technologies on the bulk transmission system as a result of American Recovery and Reinvestment Act (ARRA) grants
- NASPI provides a focused forum for timely exchange of information on synchrophasors among industry (both utilities and vendors), lab, and university communities
- The functions of NASPI are currently transferring to standing industry-led groups and committees including
 - NERC Synchronized Measurements Subcommittee
 - WECC Joint Synchronized Information Subcommittee
 - IEEE Power Systems Relaying Committee
- NASPI has largely completed its original PMU-oriented mission, however
 - NASPI will be one of the key players supporting Office of Electricity initiatives
 - Evaluate opportunities for advancing in the grid monitoring for a better system monitoring and detection.

NASPI supporting the DOE Initiatives

1. North American Energy Resiliency Model (NAERM)

Working with the national labs and relevant stakeholders OE will develop an integrated model of multiple infrastructures to study, analyze, and address vulnerabilities in the North American Energy System. This model is intended to allow us for sequencing of events to understand risk across critical energy infrastructure sectors and identifying key energy infrastructure interdependencies as well as identify potential infrastructure investments to improve resiliency and mitigate risks associated with energy system interdependencies

2. Revolutionize Sensing Technology Utilization

OE will pursue integration of high-fidelity, low-cost sensing technology for predictive and correlation modeling for electricity and oil and natural gas systems taking advantage of the advancements in computing capabilities as well as asset management such as predictive maintenance of equipment.



Questions



Thank you.

