

DOE/OE Transmission Reliability Program

North American Synchrophasor Initiative (NASPI) and Advanced Applications Research & Development (AARD)

Internal Program Review

27-28 June 2013

Washington, DC

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Management Review Topics

- Project objective
- Major technical accomplishments that will be completed this year
- Deliverables and schedule for activities to be completed under FY13 funding
- Risk factors affecting timely completion of planned activities as well as movement through RD&D cycle
- Early thoughts on follow-on work that should be considered for funding in FY14





Management Review Issues

- RD&D stage of the project:
 - Theoretical study—proof of concept
 - Modeling/simulation—using real data?
 - Prototype development
 - Field demonstration—industry partner
 - Pre-commercial—formal relationship with vendor?
- How important is the research for DOE's R&D program?
- What (if anything) should be done to improve this research activity?





Agenda

Day One: Thursday, June 27th

- Baselining Studies and Analysis: Bharat Bhargava, EPG
- Baselining Studies and Analysis: Brett Amidan, PNNL
- Synchrophasor Standards Support and Development: Ken Martin, EPG
- Advanced Synchrophasor Metrology: Joe Gracia, ORNL
- GPS Issue Management: Mark Buckner, ORNL
- Technology Assessment for Next Generation PMU: Mark Buckner, ORNL
- Measurement-Based Stability Assessment: Dan Trudnowski, Univ. of Montana
- Mode Meter Development: Ning Zhou, PNNL
- Spectral Analysis of Power Grid PMU Data: Ning Zhou, PNNL
- Modal Analysis for Grid Operations (MANGO): Ning Zhou, PNNL





Agenda

Day One: Thursday, June 27th (continued)

- Dynamic System Identification Toolbox Capabilities Update: Frank Tuffner, PNNL
- Model Validation Project: Bernie Lesieutre, University of Wisconsin
- Analysis of Emerging Multi-Terminal HVDC: Harold Kirkham, PNNL
- Wind power plant modeling and stability analysis using PMUs: YC Zhang, NREL

Day Two: Friday, June 28th

- Synchrophasor Data Validation: Ken Martin, EPG
- Synchrophasor Data Conditioning and Validation: Jim Thorp, Virginia Tech
- Voltage Stability: Joe Chow, Rensselaer Polytechnic Institute
- Development and Testing Oscillation Management System (OSM): Mani Venkatasubramanian, Washington State Univ.
- Automatic Reliability Reports (ARR) Research & Implementation: Alejandro Dominguez-Garcia & Pete Sauer, Univ. of Illinois
- ARR Research & Implementation: Carlos Martinez, ASR, Inc.
- Reliability Standards Analysis and Assessment: Gil Tam, EPG



