DOE Update

NASPI Working Group

February 3, 2009
Scottsdale, Arizona

Phil Overholt
Office of Electricity Delivery and Energy Reliability

Don Geiling
National Energy Technology Laboratory

Outline

- Update on NASPInet architecture specification contract progress by the DOE National Energy Technology Laboratory (NETL)

- DOE and NERC Work with ERCOT to implement a phasor network in Texas

- DOE ongoing research and development on applications and analysis tools using phasor data

NASPI Network Architecture Specification Progress Report

- Quanta Technology, LLC

- Final Specification due end of April 2009

- DOE will conduct periodic contract progress reviews through the NASPI Data & Network Management Task Team

Specification Development Schedule

- Official Progress Review (Draft Spec)   Feb 3
- Deliver Draft Specification   Feb 24
- Official Progress Review (Final Spec)   Mar 30
- Meeting – last chance edits   Apr 20
- Deliver Specification to DOE   Apr 25
- Project ends   Apr 27

NASPI "Reading Room" for Public Info & Comment

- Available at *www.netl.doe.gov* under "Solicitations & Business"
- Advertised in FedBizOpps.gov on January 6
- Posted documents
    - Conceptual Framework revised presentation materials
    - Brief notes on Review Meeting for Conceptual Framework
    - DOE contract with Quanta, redacted
- As of January 31
    - 211 site visits
    - 152 document downloads
    - No comments received
- Comments go to Don Geiling at DOE
- Comments will be forwarded to Kris Koellner/Paul Myrda

NERC
NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

NASPI North American SynchroPhasor Initiative

ERCOT Support

- Collaboration with the Center for the Commercialization of Electric Technologies (CCET) and ERCOT

- Installed Real Time Dynamics Monitoring System (RTDMS) at ERCOT in October

- Stream AEP phasor data to the RTDMS in December

- DOE/CERTS develop an ERCOT phasor technology deployment roadmap in consultation with CCET, Texas utilities and ERCOT

DOE Support for North American SynchroPhasor Initiative

- Leadership and Task Team-directed research

- Real Time Dynamic Monitoring System (RTDMS)

- Technical Support and Outreach

- NASPInet Specification Award

- NIST SynchroMetrology Lab

DOE R&D to Support an Automatic Switchable Network

- Substation Information Integration

- Analysis, Monitoring and Visualization Tools for Grid Operations
  - Wide-Area Dynamic Monitoring
  - Risk-Based Security Assessment
  - Statistical Analysis of Abnormal Behavior
  - Wide-Area Multidimensional Nomogram
  - Measurement-Based Stability Assessment

- Demonstrations
  - Adaptive Islanding
  - Real-Time Control

Questions?

- NASPI "Reading Room"

  – www.netl.doe.gov, Solicitations & Business

- V&C Peer Review, Reliability and Controls

  – https://events.energetics.com/v&c08/