

NERC Update

Robert W. Cummings NERC Director, Reliability Initiatives and System Analysis **NASPI Working Group Meeting** February 20, 2013











- February 2004 NERC became involved in Eastern Interconnection Phasor Project (EIPP)
- Summer 2007 Transition from EIPP to NASPI
- August 2007 Began use of PMUs to analyze disturbances
 - August 4, 2007 El Frequency Disturbance
 - September 18, 2007 MRO System Disturbance
 - February 14, 2008 WECC PACE Disturbance
 - February 26, 2008 FRCC South Florida Disturbance

Transition to NERC Structure



NASPI → NERC

- NERC funding of NASPI ending in 2013
- Need for core group(s) for Planning and Operations Functions
- Transition to NERC committee support AS APPROPRIATE
- Not all functions will be transferred to NERC
 - Some to IEEE Power System Relay Committee
 - Self-sustaining user group NASPI 3.0??

Outline of Transition Plan



- Synchronized Measurement Subcommittee (SMS)
 - Approved by Planning Committee in December
 - Now staffing
- Operations Support Operating Reliability Subcommittee (ORS)
- Network support Telecommunications Working Group (TWG)
- Data transfer support Data Exchange Working Group (DEWG)
- Equipment Standards IEEE PSRC



SMS Scope

- 1. Formulate and guide the NERC vision and activities to promote wide-area PMU measurement systems
- 2. Establish methodologies and data sharing agreements to assure open sharing of PMU data for reliability
- NERC's focal point for interaction with entities outside of NERC (IEEE and IEC) on policy and standards related to PMUs
 - on Guidelines for PMU hardware and software
 - Appropriate standards modifications (or additions) for PMU data transport and interoperability



SMS Scope

- 4. Provide data for power system performance analysis for disturbances including
 - Coordination with Event Analysis Subcommittee and the System Analysis and Modeling Subcommittee
- Maintain guidelines, technical reference documents, and training materials in support of relevant NERC uses of PMUs
- Develop appropriate guidelines for the placement of Phasor Measurement Units (PMU) across North America



SMS Scope

- 7. Monitor and advice on the design and operation of the synchrophasor network and data architecture
- 8. Identify ongoing recommendations and guidelines for synchronized measurements to improve the reliability of the Bulk Electric System
- 9. Develop and maintain appropriate procedures and guidelines for base line power system performance analysis using synchrophasor data
- 10. Review and coordinate proposed new synchrophasor applications with any appropriate NERC groups to support coordinated advancement of the use of PMU data



