Announcement
New Technical Standard for Synchrophasors Adopted by the International Electrotechnical Commission

May 18, 2012

ATLANTA – The North American Electric Reliability Corporation (NERC) and the North American SynchroPhasor Initiative (NASPI) is pleased with the International Electrotechnical Commission’s (IEC’s) adoption of a technical standard that establishes improved synchrophasor data communication. The approval of technical interoperability standards is an important milestone marking the maturity synchrophasor technology and systems. Further, industry consensus allows manufacturers to standardize their offerings.

“Adoption of this IEC standard supports the integration of synchrophasor technology into day-to-day grid operations,” said Mark Lauby, vice president and director of Reliability Assessment and Performance Analysis at NERC. “We appreciate the hard work of volunteer experts from IEC, the Institute of Electrical and Electronics Engineers (IEEE), NASPI and the federal government who contributed to the development of this technical standard.”

IEC 61850-90-5 is one of several key technical interoperability standards adopted to advance smart grid technology. The new standard addresses delivery of high-speed data collected by synchronized phasor measurement devices over wide-area communications networks. Further, they incorporate data latency requirements for Wide-Area Monitoring Protection and Control applications and assure cybersecurity protection for this data.

The Department of Energy is working with the National Institute of Standards and Technology (NIST) to accelerate the development of key smart grid interoperability standards, including IEC 61850-90-5, with funding and coordination. NASPI’s Performance and Standards Task Team (PSTT), working with NIST, continues to develop standards and guidelines for phasor measurement units, phasor data concentrators, GPS time-stamping of phasor data, and related synchrophasor technology elements.
More than 65 transmission owners and operators across North America have deployed synchrophasor systems to monitor transmission grid conditions and improve grid operations. Most of these phasor projects have received financial and technical support from the Department of Energy under the Smart Grid Investment Grants funded by the 2009 American Reinvestment and Recovery Act.

The North American SynchroPhasor Initiative (NASPI) is an international collaborative effort between NERC, the Department of Energy and the North American electric industry focused on accelerating the use of synchrophasor technology to enhance grid reliability. For more information, visit NASPI website.

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The North American Electric Reliability Corporation’s mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission in the United States to establish and enforce reliability standards for the bulk-power system. NERC has equivalent relationships with provincial and federal authorities in Canada. NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast, and summer and winter forecasts; monitors the bulk power system; and educates, trains and certifies industry personnel. Learn more at www.nerc.com