

NERC and CAISO sign data sharing agreement as part of North American Synchrophasor Initiative

Today NERC and the California Independent System Operator signed a data-sharing agreement as part of the North American Synchrophasor Initiative.

“This agreement is a step forward in the industry’s continuing efforts to modernize the power grid. While ‘smart grid’ is a term most often applied at the distribution level, sharing of real-time synchronized data across a wide area opens a door to improving control and protection of the entire grid. This project will allow researchers to develop new methods for monitoring grid conditions and evaluating potential emerging problems,” noted Gerry Cauley, President and CEO of NERC. “Our thanks go to CAISO for being the first transmission operator in North America to adopt this agreement and for recognizing the value of synchrophasor technology to overall grid reliability.”

Synchrophasors are precise grid measurements now available from monitors called phasor measurement units (PMUs). PMUs measure grid conditions at high speed (typically 30 observations per second – compared to one every 4 seconds using conventional technology). Each measurement is time-stamped according to a common time reference. Time stamping allows synchrophasors from different utilities to be time-aligned (or “synchronized”) and combined together providing a precise and comprehensive view of the entire power grid.

Phasor data provide excellent visibility into grid conditions and stress, and can be used to trigger corrective actions to maintain reliability. Interconnection-wide synchrophasor systems and data-sharing – such as that enabled by the new NERC agreement – are creating significant improvements in wide-area monitoring and visibility and improving grid operators’ situational awareness.

“Improving an operator’s visualization of the grid is a key component of NERC’s mission to improve grid reliability,” said Cauley.

NERC expects additional transmission owners and operators to sign the data-sharing agreement in the coming weeks. Over 800 additional PMUs will be added onto the North American bulk power system over the next three years using funds provided by utilities and U.S. Department of Energy American Reinvestment and Recovery Act grants, and that data will be covered under the new data-sharing agreement.

The North American SynchroPhasor Initiative is a joint effort between NERC, the U.S. Department of Energy and North American electric industry participants (including transmission owners and operators, the research and academic communities, consultants and equipment manufacturers) to accelerate development and use of synchrophasor technologies to improve grid reliability.

The North American Electric Reliability Corporation's (NERC) mission is to ensure the reliability of the bulk power system in North America. To achieve that, NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast and winter and summer forecasts; monitors the bulk power system; audits owners, operators, and users for preparedness; and educates, trains, and certifies industry personnel. NERC is a self-regulatory organization, subject to oversight by the U.S. Federal Energy Regulatory Commission and governmental authorities in Canada. Learn more at www.nerc.com.

For further information please contact:

Lynn Costantini

lynn.costantini@nerc.net