

CIGRE/EPRI: GRID OF THE FUTURE SYMPOSIUM

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Tutorial #4



The Synchrophasor Starter Kit

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Tutorial Abstract

The North American Synchrophasor Initiative tutorial will give practitioners much of the practical information and resources needed to plan and implement a successful synchrophasor system deployment. This tutorial will address the following topics:

- The value proposition for synchrophasor technology and high-value applications
- How phasor measurement units can be used to satisfy various mandatory NERC reliability standards
- An overview of relevant technical interoperability standards and how they affect different elements of a synchrophasor system
- A summary of the functionalities and capabilities available and appropriate for acquiring new PMUs or converting digital relays into PMUs
- Guidelines and tools for PMU system design, installation and commissioning and communications system testing
- Data network requirements for feeding PMU data into the Eastern Interconnection Data Sharing Network

- How to use PMU data for event analysis, whether at the event level or the system level
Appropriate cyber-security guidelines for a synchrophasor system

The tutorial instructors are some of the leading experts working in the electric industry synchrophasor field today, and have designed and implemented effective synchrophasor standards, systems and applications.