IEEE Announces Five New Standards and a Standards-Development Project for the Smart Grid

IEEE, the world's largest professional association advancing technology for humanity, today announced five new standards, as well as a modified standards-development project, that are all intended to aid the efficient rollout of the smart grid worldwide. The new standards and standards projects recently approved by the IEEE Standards Association (IEEE-SA) Standards Board carve critical new dimensions into the IEEE portfolio of more than 100 active standards or standards in development relevant to the smart grid.

"The new standards approved by the IEEE-SA Standards Board are the byproduct of intensifying smart-grid deployment around the world," said Judith Gorman, managing director, IEEE-SA. "New lessons have been learned, and best practices and insights on challenges are surfacing as smart-grid rollout continues to gain steam globally. The IEEE-SA has been a worldwide leader in smart-grid standards development even prior to the movements inception, and these standards and projects underscore our ongoing commitment to accelerating realization of the smart grids far-ranging and futuristic promise for power users, utilities and manufacturers alike."

Smart-grid standards newly published by IEEE-SA include the following:

IEEE C37.118.1™-2011 – Standard for Synchrophasor Measurements for Power Systems – is intended to define synchronized phasors and frequency measurements in substations, along with methods and requirements for verifying such measurements in power system analysis and operations under both static and dynamic conditions. IEEE C37.118.1 is available for purchase at the IEEE Standards Store.

IEEE C37.118.2™-2011 – Standard for Synchrophasor Data Transfer for Power Systems – is intended to specify a method (including messaging types, use, contents and data formats) for real-time communications among phasor measurement units (PMUs), phasor data concentrators (PDCs) and other power-system applications. IEEE C37.118.2 is available for purchase at the IEEE Standards Store.

IEEE C37.238™-2011 – Standard Profile for Use of IEEE Std. 1588 Precision Time Protocol in Power System Applications – is designed to provide precise time synchronization within and among substations across wide geographic areas via Ethernet communications networks. The standard is intended to extend proven techniques for precise time distribution to applications such as mission-critical power-system protection, control, automation and data communication. IEEE

C37.238 is available for purchase at the IEEE Standards Store.

IEEE C37.232™-2011 – Standard for Common Format for Naming Time Sequence Data Files (COMNAME) – is designed to define the naming of time sequence data (TSD) files that originate from digital-protection and -measurement devices. The standard procedure -gaining in popularity among major utilities, independent system operators and manufacturers and recommended for use by North American Electric Reliability Corporation (NERC) and the Northeast Power Coordinating Council (NPCC)-helps resolve problems associated with reporting, saving, exchanging, archiving and retrieving large numbers of files. IEEE C37.232 is available for purchase at the IEEE Standards Store.

IEEE 1020™-2011 – Guide for Control of Small (100 kVA to 5 MVA) Hydroelectric Power Plants – updates an existing IEEE standard to address significant technology changes impacting small hydro-plant control issues and monitoring requirements that have emerged since the guides original publication. IEEE 1020 is available for purchase at the IEEE Standards Store.

Additionally, IEEE-SA recently modified the scope and purpose of an existing standards-development project related to the smart grid. IEEE P1409™ – Draft Guide for the Application of Power Electronics for Power Quality Improvement on Distribution Systems Rated 1 kV Through 38 kV – is being developed to introduce and define the emerging technology of "custom power" and detail guidelines and performance expectations for its application in improving power quality and control.

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http://www.ecnmag.com/news/2012/03/ieee-announces-five-new-standards-and-standards-development-project-smart-grid?qt-video_of_the_day=0&qt-most_popular=0