NIST releases update to smart grid framework

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An expanded list of standards, new cybersecurity guidance and product testing proposals are among the new elements in an updated roadmap for Smart Grid interoperability released today for public comment by the National Institute of Standards and Technology (NIST).

The NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 2.0, builds upon and updates a January 2010 report. NIST's first outline, Release 1.0, laid out an initial plan for transforming the nation's aging electric power system into an interoperable Smart Grid—a network that will integrate information and communication technologies with a power-delivery infrastructure, enabling two-way flows of energy and communications.

"Making such dramatic changes to the power grid requires an overarching vision of how to accomplish the task, and this updated Framework advances that vision," said NIST's George Arnold, the National Coordinator for Smart Grid Interoperability. Because the Smart Grid will be a highly complex system of interacting systems, it is essential that everyone with a stake in the new grid have a common understanding of its major building blocks and how they interrelate, Arnold said. "Utilities, manufacturers, equipment testers and regulators will find essential information in the Framework that was not previously available."

Release 2.0 adds 22 standards, specifications and guidelines to the 75 NIST recommended as immediately applicable to the Smart Grid in the

first [roadmap](). New to the 2.0 version is a chapter on the roles of the [Smart Grid]() Interoperability Panel (SGIP), an organization created by NIST in November 2009 to provide an open forum for members to collaborate on standards development. More than 700 organizations are now members of the SGIP, which recently made the first six entries into its Catalog of Standards, a technical document for those involved with developing grid-connected devices. Eventually, hundreds of such [standards]() will be entered into the Catalog, which is also described in the SGIP chapter.

Further improvements and additions to the original document include:

More information: he request for public comment on NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 2.0, is available from the Federal Register at [www.federalregister.gov/articl … raft-request-for#p-3]() and will be open for public comment until 5:00 PM Eastern time on Nov. 25, 2011. The document itself may be found on the NIST Smart Grid Collaboration Wiki at [collaborate.nist.gov/twiki-sgg … artGrid/IKBFramework]() .

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