

## **IEEE FELLOW JOHN MCDONALD GIVES TESTIMONY ON PROGRESS OF STANDARDS DEVELOPMENT AND CYBER SECURITY FOR SMART GRID**

*IEEE Smart Grid Expert Addresses U.S. House of Representatives' Subcommittee on Technology and Innovation*

**PISCATAWAY, N.J., USA, July 02, 2010** – IEEE, the world's largest professional association for the advancement of technology, today announced that John McDonald, IEEE Fellow and Director of Technical Strategy and Policy Development for GE's Digital Energy business; gave testimony on the progress of standards for Smart Grid interoperability and cyber security before the U.S. House of Representatives' Subcommittee on Technology and Innovation, House Committee on Science and Technology. Held July 01, 2010, the hearing was entitled *Smart Grid Architecture and Standards: Assessing Coordination and Progress*.

The purpose of the hearing was to review the efforts of the National Institute of Standards and Technology (NIST) to coordinate the development of standards for Smart Grid technologies. The hearing examined the status of the standards development process and focused on whether the current efforts are meeting the needs of stakeholders and are advancing national Smart Grid efforts. Mr. McDonald's testimony addressed key issues such as:

- The proficiency of the Smart Grid Interoperability Panel in coordinating tasks for the standards development process and gathering stakeholder input, as well as the policies and procedures currently in place to ensure private stakeholder buy-in and adoption of the standards that emerge from the process.
- Which standards are currently available to achieve interoperability of Smart Grid technologies and the top standard-related priorities for advancing their deployment

During the hearing, Mr. McDonald and four other leading Smart Grid experts addressed a range of important issues including testing & certification, cyber security and privacy matters, in addition to standards.

“As one of the leading sources of Smart Grid expertise, IEEE is focused on driving technology advancements needed for Smart Grid infrastructure development. Providing input on the system architecture and standards that must be in place to ensure the transformation of our nation's

electrical grid to a more automated, interactive and intuitive power delivery system is the perfect platform for IEEE Smart Grid to lend its expertise,” said IEEE Fellow John McDonald.

“Ensuring stringent testing and certification, and addressing cyber security and privacy of information, are critical to the success of Smart Grid. Also crucial to this undertaking are developing system architecture and standards that provide the essential foundation for bringing together the electrical and communications infrastructure, and for evolving technology to meet many and disparate needs. Both the IEEE through its Standards Association and NIST have already shown tremendous progress in these areas,” McDonald continued.

The following witnesses also testified before the Subcommittee:

**Dr. George Arnold**, National Coordinator for Smart Grid, National Institute of Standards and Technology;

**Ms. Lillie Coney**, Associate Director, Electronic Privacy Information Center (EPIC);

**Mr. Mason Emmett**, Associate Director of the Office of Energy Policy and Innovation, Federal Energy Regulatory Commission;

**Mr. Conrad Eustis**, Director of Retail Technology Development, Portland General Electric.

IEEE has more than 100 standards and standards-in-development relevant to Smart Grid, including over 20 IEEE standards named in the NIST Framework and Roadmap for Smart Grid Interoperability Standards. Earlier this week, IEEE announced details of two Smart Grid standards, 1815 DNP3 and P1547.8:

- IEEE 1815 Distributed Network Protocol (DNP3): A standard for electric power systems communications. The newly ratified standard, which improves device interoperability and strengthens security protocols, was fast-tracked for completion and was delivered in only seven months.
- IEEE P1547.8: A draft standard establishing a common technical platform for distributed resources interconnection applications. It also addresses energy storage challenges coming into play across the distributed resources and Smart Grid industries. The proposed standard expands upon IEEE 1547, while incorporating industry and NIST recommendations for improved interconnection performance functionality.

For more information about IEEE’s leadership role in Smart Grid technology development, please visit the IEEE Smart Grid Web Portal at <http://smartgrid.ieee.org/>.

Witness testimonies given at the Committee on Science and Technology's Subcommittee on Technology and Innovation hearing can be downloaded at:

[http://science.house.gov/publications/hearings\\_markup\\_details.aspx?NewsID=2866](http://science.house.gov/publications/hearings_markup_details.aspx?NewsID=2866)

A webcast of the subcommittee hearing is available at:

<http://science.edgeboss.net/wmedia/science/scitech10/070110.wvx>