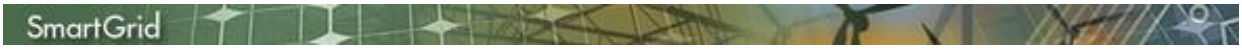

NIST Smart Grid Update

May 2013

NIST Funds Multi-Year Cooperative Agreement Program with SGIP 2.0

At a public, town hall-style webinar on April 19 (see link to recorded webinar), NIST and SGIP leaders unveiled a newly signed cooperative agreement between the two organizations. The agreement, with a budget and performance period through the end of 2015, provides SGIP with up to $ 2.75 million, based on continued progress and subject to the availability of funds.

The agreement is the culmination of a solicitation and proposal process that began in December, when NIST posted a Federal Funding Opportunity for a "Smart Grid Interoperability Standards Cooperative Agreement Program." The program, which will involve substantial involvement by NIST, will support continuous innovation of the electrical grid through the coordination and acceleration of standards development and harmonization and advancement of the interoperability and security of smart grid devices and systems.

David Wollman, Smart Grid and Cyber-Physical Systems Program Office (Leader of NIST Smart Grid Program with acting responsibilities for Director, Smart Grid and Cyber-Physical Systems Program Office) added, "The cooperative agreement with SGIP is a major step forward for the NIST Smart Grid Program and SGIP, and it supports a collaborative relationship and key technical activities to advance smart grid interoperability in partnership with the smart grid community."

"We are thrilled to continue our collaborative work with NIST as it relates to advancing smart grid interoperability," said Patrick Gannon, President and Executive Director of SGIP. "The 180-plus members of SGIP understand how critical it is to support the modernization of electric grid infrastructure with interoperable and secure technology solutions. Having NIST as a partner will only accelerate our organization's ability to fulfill our mission."

April 3 Workshop Launches NIST's Development Process for Cybersecurity Framework

More than 400 in-person attendees (along with more than a thousand online attendees) participated in the April 3 workshop that marked the start of an intense NIST-led process to develop a framework to reduce cyber risks to critical infrastructure. The "Cybersecurity Framework," which is mandated by President Obama's February 12 Executive Order, will include a set of standards, methodologies,

procedures, and processes that align policy, business, and technological approaches to address cyber risks.

The April 3 workshop provided a forum for NIST staff to gather information to help identify, refine, and guide the many interrelated considerations, challenges, and efforts needed to develop the Framework. In a related information-gathering effort, NIST also issued a Request for Information (RFI), which closed on April 8. More than 250 individuals and organizations have submitted responses to the RFI.

The next milestone in the process will be a three-day workshop, to be held in Pittsburgh, PA, May 29-31, 2013. Two more workshops are planned for later in 2013. The first draft of the framework is slated to be released for public comment by the end of September, 2013.

More information—including a webcast recording of the April 3 workshop, access to RFI responses, and registration details for the May 29-31 workshop—is available online at the Cybersecurity Framework website.

Smart Grid R&D Opportunities Outlined in Two New NIST Reports

Two new reports outline a host of challenges facing the smart grid R&D community as the nation takes on the task of modernizing the aging power grid. Both reports –Technology, Measurement, and Standards Challenges for the Smart Grid and its companion, Strategic R&D Opportunities for the Smart Grid – identify the most important technical issues in the smart grid arena, and prioritize impediments and R&D areas that must be addressed for successful deployment of the smart grid.

The two reports are the product of a workshop held in August 2012 in Boulder, CO, for more than 90 leading technical and industry experts in the smart grid community. The first publication provides a technical summary of the workshop, while the second publication is written at a more general level and should prove useful to a broader audience.

The workshop was a collaborative effort of NIST and the Renewable and Sustainable Energy Institute (RASEI), a joint institute of the University of Colorado Boulder and the National Renewable Energy Laboratory (NREL). The documents reflect the near-consensus opinions of the attendees, and are intended to be of particular value to industry.

Strong Membership Growth Seen at SGIP 2.0 in Its First Quarter

Throughout 2012, NIST and SGIP leadership worked together on a business sustainment plan to transition SGIP to an industry-financed legal entity that continues a working partnership with government. Since January 1, this transition process has accelerated, and SGIP is now functioning as an independent organization—SGIP 2.0, Inc.

Although SGIP 2.0 is now operating independently, NIST will continue to be an active participant and strong supporter (see above for article on NIST-SGIP Cooperative Agreement). Therefore,

we'll continue to report in this e-newsletter on some of the ongoing work within that organization.

As SGIP 2.0 completes its first quarter as an independent, member-funded organization, recent highlights include the following:

- Surpassing the milestone of $ 1 million in annual revenue from membership dues, with more than 180 member organizations.
- Naming Susan Hoyler as Director of Technical Operations.
- Contracting with Kavi Corporation to provide a state-of-the-art membership collaboration system, now available as the "Workspace" for members (members.sgip.org).
- Announcing preliminary details about the first SGIP Annual Meeting, to be held November 5-7, 2013, in Palm Beach, FL.

We strongly encourage readers to also visit the SGIP 2.0 website (www.sgip.org) for more news and for information on how to get involved.

NIST's Budget Proposal for FY 2014 Includes $10-million Cyber-Physical Systems Initiative

On April 10, President Obama released his budget proposal for Fiscal Year 2014, which includes $928.3 million for NIST, an increase of $177.5 million (19.1%) from FY 2012 enacted levels. The following week, on April 18, NIST Director Dr. Patrick Gallagher testified before the House Committee on Science, Space, and Transportation's Subcommittee on Technology with an overview of the FY 2014 NIST Budget. And on April 19, Gallagher presented a budget briefing webinar for constituents (available online).

Of special interest to the smart grid community are two initiatives—$10-million for cyber-physical systems and $15-million for cybersecurity R&D and standards. In Gallagher's testimony to Congress, he described the cyber-physical systems initiative as follows:

"The convergence of networking and information technology with manufactured products, engineered systems of products, and associated services are enabling a new generation of "smart" or cyber-physical systems (CPS). These CPS are critical components and key value added features of items that consumers use every day from cars and telecommunications to buildings and medical devices. As CPS have grown exponentially in complexity, dramatic improvements in the systems engineering, integration and testing are needed. This initiative will enable NIST to develop the measurement tools and standards to address three key problem areas that cut across all CPS: model-based diagnostics and prognostics needed to manage and optimize the performance of CPS (like electric grids, and transportation networks); time synchronization, which is critical to the efficient operation of systems; and, secure operation in order to ensure that widely deployed CPS systems have appropriate risk-based security solutions."
