

# THE CONDUCTOR

News & Activities of SGIP



August 6, 2015

## President's Update



Membership,

I hope you have had the opportunity to take some vacation or soon will to replenish yourself with some sun and relaxation. September is around the corner and the Fall is a busy time.

### DOE FOA

I mentioned last month that SGIP responded to a DOE FOA on Solar Bankability data. Our concept paper was well received and we were invited to submit a full RFP, which we submitted on July 30th. If we win this RFP, SGIP will lead a 24-month Stakeholder and Engagement Management Project focused on Solar

Bankability data to advance transactions and access of solar data. The objective is to drive out inefficiencies in data exchanges and thereby reduce soft costs associated with solar projects. A reduction in the cost of capital as a result of better access to data to reduce risk could result in savings of nearly \$9 billion over the next ten years to solar users. The Solar Energy Industry Association (SEIA) and the National Renewables Energy Lab (NREL) will support SGIP.

The proposed project focuses on the entire solar project life cycle and integration across multiple industry players. To date, existing efforts to create common solar data schemas and business processes have mostly focused on segments of the life cycle that represent specific pain points in the implementation of solar or critical barriers that are preventing high penetration. As the industry has expanded over recent years, a proliferation of valuable but disconnected efforts to improve data interoperability have left a fragmented landscape of tools, repositories, and data sets across the public and private sectors. The proposed project would seek to integrate those efforts across the life cycle, while still focusing on bolstering and enabling the private sector momentum in this space to create a financially self-sustaining data ecosystem. The project will result in a standard way of transmitting solar data with the goal of driving adoption to 60% of the solar market participants.

## Regulatory & Policy & Government

### 2015 Energy Policy Act of 2015

Sen. Lisa Murkowski working with Maria Cantwell of Washington. Released on July 22, 2015 the Energy Policy Modernization Act of 2015, which features five titles covering energy efficiency, infrastructure, supply, accountability, and land conservation. A few of the things I noted in this policy bill are:

1. Under title I, there is mention of establishing an open data initiative for Federal data center

energy usage data, with the purpose of making the data available for others

2. Under Title II, Infrastructure, there is:

- \$65M for each of fiscal years 2017 through 2025 for cyber security testing and cyber resilience program
- \$15M (2017 through 2025) for Cyber Security component testing and writing of procurement guidelines
- \$10M to develop a physical and Cyber Security maturity model as well as research on hardening the grid
- Section 2303 results in a grant program to carry out eligible projects related to the modernization of the electric grid,
- Section 2304 is encouragement of micro grids

Three major areas of alignment struck me from this bill: Smart Buildings from the energy efficiency section, cyber security, and distributed energy resources and micro grids. It is key that our organization makes clear the things we are doing around these areas.

### Smart Grid Act Of 2015

There is another relevant bill that has been introduced. Senate Bill 1232, also referred as the Smart Grid Act of 2015. This bill amends the EISA 2007 to direct the Department of Energy (DOE), in collaboration with NIST, the Institute of Electrical and Electronics Engineers, and the Smart Grid Interoperability Panel, to establish the Smart Grid Interoperability Working Group. The purpose would be to promote interoperability and establishment of standards.

### DOE Issues Lab Call

DOE has a Grid Modernization Laboratory Consortium (GMLC), which is a partnership between DOE and the National Labs to drive grid modernization. Earlier in July, there was a lab call, which is a coordinated funding call just for National Labs to propose projects aligning with the defined activity areas in the call. Activities included Grid Architecture, Interoperability, Sensing and Measurement, Security, Design planning tools, to name a few. The concept papers were due 7/30 and those proposals of interest will be encouraged to submit an RFP, which will be due 9/14. While only National Labs can apply for the funding the labs can collaborate and partner with outside organizations. SGIP was asked to collaborate on one proposal that was submitted.

Thank you to all of you who are helping to make a difference. Your efforts are much appreciated. Don't forget to sign up for our Annual Conference.

Regards,



Sharon Allan  
President & CEO



## Become an SGIP Sponsor!

Become a conference sponsor for SGIP's Annual Conference in New Orleans. There is no better way to get your name and marketing out to over 300 industry thought leaders.

We currently have sponsorships available for all budget levels, from lanyards to meal sponsors. If there is something that you don't see, we can work with you to make it happen.

Please review the [sponsorship prospectus](#) or [register now](#) to become an SGIP sponsor.

To Register for SGIP's Annual Conference and to view our amazing speaker list please [click here](#).

## SGIP Hosting Webinar on Transactive Energy Modeling and Simulation Challenge



The smart grid community will have two opportunities in the next five weeks to learn about the upcoming NIST Transactive Energy Modeling and Simulation Challenge (TE Challenge). See below for details about registering for the one-hour SGIP

webinar today, and the kickoff event at NIST-Gaithersburg on Sept. 10-11, 2015.

The **TE Challenge** will bring researchers and companies with simulation tools together with utilities, product developers, and other grid stakeholders to create and demonstrate modeling and simulation platforms while applying transactive energy approaches to real grid problems. "Transactive energy," as defined by the Department of Energy GridWise Architecture Council's **Transactive Energy Framework**, refers to "a system of economic and control mechanisms that allows the dynamic balance of supply and demand across the entire electrical infrastructure using value as a key operational parameter."

The program was initiated by NIST and developed in collaboration with SGIP's Transactive Energy Coordination Group (chaired by Steve Widergren), as well as other partners from the federal government and industry. The TE Challenge will help the industry better understand the potential for TE and create a path for real-world trial implementations. The **TE Challenge website** and the soon-to-be-available TE Challenge collaboration site (watch for link on TE Challenge website) provide information about the challenge timeline, goals, and potential participants.

Today from 1:00 to 2:00 p.m. EDT, the Smart Grid Interoperability Panel (SGIP) will host a webinar providing an overview of the TE Challenge. The webinar, presented by TE leaders from NIST and SGIP, will also present draft plans of some organizations planning to participate, as well as information about how you can get involved and benefit from the Challenge. [Visit SGIP's website to register for this informative webinar.](#)

On Sept. 10-11, 2015, NIST will be hosting a kickoff event in Gaithersburg, Maryland. To view the preliminary agenda and register for the event, please visit the [conference website](#).

## News from the National Institute of Standards of Technology

### Global City Teams Challenge (GCTC): Gearing Up for GCTC 2016

Building on the momentum of the highly successful NIST Global Cities Teams Challenge (GCTC) 2015 program, smart city leaders are already looking ahead to next year. Sokwoo Rhee, Associate

Director of the NIST's Cyber-Physical Systems Program, said, "We are committed to building on the success of the GCTC and aim to convene a larger, even more global initiative that will support partnerships between local governments and innovators and advance IoT deployments in cities across the globe." Later this year, NIST and US Ignite will release plans for GCTC 2016 and will announce the date of a kickoff meeting.

The GCTC program will have a presence at next month's **Smart Cities Week 2015 event in Washington, DC (Sept. 15-17, 2015)**. Sponsored by the Smart Cities Council, the event will include two GCTC-moderated sessions (**Tuesday, Sept. 15, from 5:10 to 6:00 p.m.** and **Wednesday, Sept. 16, from 9:30 to 10:10 a.m.**) reviewing past successes and future plans of the GCTC program.

Earlier this summer, the GCTC Expo (June 1, 2015, Washington, DC)—featuring more than 60 GCTC teams and 1300 attendees—brought the GCTC 2015 program to a festive conclusion.

**Archived video footage of all 60+ presentations and keynotes** delivered at the Expo and **copies of the presentation materials are now available online**. (The **June 2015** issue of this newsletter also includes further highlights of the event).

These and other Smart Cities initiatives highlight the growing interest of the public and industry in the Internet of Things (IoT). As described in the July SGIP newsletter, one of the three SGIP focus areas for 2016 is: "Serve as a voice for Internet of Things (IoT) for the energy sector."

### **Green Button Update**

The Green Button Initiative continues to grow—and to attract attention at the highest levels of the federal government. A recent article on the White House Blog, "**Green Button Initiative Makes Headway with Electric Industry and Consumers**," reports that more than 150 utilities and service providers have committed to providing more than 60 million U.S. households (including altogether 100 million people). The article specifically calls out SGIP and NIST for their key role in the development of energy usage data standards and in the creation of "a rich ecosystem of interoperable solutions that enable consumer access to electricity usage data."

## **GETTING TECHNICAL**

UPDATES FROM THE SGIP PROJECT MANAGEMENT OFFICE

### **BIG NEWS! 3 PAP Closures**

The SGIP Board of Directors, Technical Committee, and Program Management Office (PMO) are thrilled to announce the successful completion of 3 Priority Action Plans (PAPs) in July. At the July 10th SGIP BoD meeting, the Board accepted the Technical Committee and PMO's recommendation to close the PAPs.

In fact, the SGIP has now successfully completed and closed 7 different PAPs since October, 2014 bringing the total number of completed PAPs to a staggering 18 technology and standards gap-filling projects! These PAPs have covered a wide variety of Smart Grid priorities including metering, electric vehicles, Smart Grid internet protocol usage, wireless communications, pricing and scheduling, substation automation, field devices, energy usage information, wind plants, power line carrier technologies, demand response, and distributed energy resources.

Congratulations to the following teams for successfully completing their objectives and completing their PAP projects:

- PAP-07: DER/Electric Storage Interconnection & Object Model Standard--CHAIR: Dr. Al Hefner, NIST
- PAP-08: CIM/61850 for Distribution Grid Management--CHAIR: Jerry FitzPatrick, NIST
- PAP-15: Power Line Communications--CHAIR: Dr. David Su, NIST (retired)

We are truly proud of your efforts and appreciate the hours of devoted volunteer time from our members. Thank you again and CONGRATULATIONS!

### **PAP-22 Update**

As discussed in the June SGIP Newsletter, PAP-22, Electric Vehicle (EV) Fueling Submetering Requirements, was awaiting a decision by the National Conference on Weights and Measures (NCWM) on standardized code for EV routine inspections and test procedures by state and local officials. We are pleased to announce that on July 22nd, the code was adopted and will be included as new legal metrology requirements in NIST Handbook 44 to address the sale of electrical energy through commercial Electric Vehicle Supply Elements (EVSEs) to recharge EVs. There is still a requirement to create a checklist of test criteria to develop based on the code itself. Each state must also adopt the handbook in part or entirety as law and regulation, some do this automatically, while others may go through a legislative process or have adopted earlier versions of the handbook.

An examination procedure outline (EPO) is the step by step procedure used by regulatory officials. Juana Williams, NIST Legal Metrology Devices Program, is developing a draft EPO to be numbered EPO 30. The EPO is an important tool to assist the states in enforcing the code, which will become effective January 1, 2016 in most jurisdictions. Also critical is the demonstration of the availability of a suitable test standard(s) that is traceable to the International System. This work is taking place in the EVSE Subcommittee Chaired by Ted Bohn.

Congratulations to PAP-22 on this important milestone!

### **PAP-17 Reaches Important Milestone**

PAP-17, Facility Smart Grid Information Standard, is nearing completion of the ASHRAE/NEMA Standard 201P, Facility Smart Grid Information Model (FSGIM). ASHRAE has set the dates for the public review of FSGIM August 7 – October 6, 2015. To access the public review document during the review period and for instructions to submit public review comments, go to the ASHRAE web site [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews). In addition to the text of the standard itself, it will also be possible to download an electronic version of the model that can be used by UML tools to explore the features of the draft standard.

### **OpenFMB**

**A slide deck describing OpenFMB has been posted on the SGIP website.**

The team's met Face-to-Face on July 8-9 at EPRI's facilities in Charlotte, NC. The meeting was primarily focused on modeling, but also had breakouts for marketing and planning for the demonstration at the **SGIP's Annual Conference in New Orleans Nov 3-5.**

### **ASHRAE/NEMA Publication**

Dates have been set for the Publication Public Review of ASHRAE/NEMA Standard 201P, Facility Smart Grid Information Model. The review period will be August 7, 2015 – October 6, 2015. To access the public review document during the review period and for instructions



to submit public review comments, go to the [ASHRAE web site](#). In addition to the text of the standard itself, it will also be possible to download an electronic version of the model that can be used by UML tools to explore the features of the draft standard.

Please feel free to share this information with anyone whom you think might be interested in reviewing the standard.

### **Cyber Security Task Force**

The SGIP thanks Vicky Pillitteri for her many years of service to the SGCC and congratulates her on her new role supporting NIST's Program Office. This is a great opportunity and a nice reward for her hard work. Vicky has promised to stick around and help transition the SGCC to its new leadership under Suzanne Lightman.



We also welcome Suzanne Lightman as the new Chair for SGCC. Suzanne is a Senior Information Security Advisor at NIST. She has over a decade of experience in information security policy in positions all over the government, as well as in the private sector. She has held positions in both the legislative and executive branches which gives her a unique perspective on the development and implementation of government policy. Currently, Ms. Lightman is a Senior Advisor at the Computer Security Division of the Information Technology Lab at the National Institute of Standards and Technology (NIST). In that position, she is involved with a diverse portfolio of topics including development of the Cybers Security Framework required under Executive Order 13636, cyber security in cyber-physical systems, identity management, and cyber security policy. She is also one of the team developing the Privacy Risk Management Framework at NIST.

Congratulations to both Vicky and Suzanne!

### **Candidate Ballot Information**

Six ballots opened on May 15th and are scheduled to close on August 14th at 11:59pm (ET). If you have not voted please do so as soon as possible.

- American National Standard For Utility Industry End Device Data Tables (ANSI C12.19-2012)
- Model of a demand-response energy management system (IEC 15067.3)
- Power systems management and associated information exchange - Data and communications security - Part 8: Role-based access control (IEC 62351-8)
- Utility Industry Metering Communication Protocol Application Layer - End Device Data Tables - (IEEE 1377)
- Standard for Low Frequency (less than 500 kHz) Narrow Band Power Line Communications for Smart Grid Applications (IEEE 1901.2)

- Guideline for the Implementation of Coexistence for Low Frequency Narrowband Power Line Communication Standards in the Smart Grid (NIST IR 7943)

## Upcoming Events

### September 15-17: Smart Cities Week, Washington, D.C.

*Smart Cities Week 2015 event in Washington, DC (Sept. 15-17, 2015). Sponsored by the Smart Cities Council, the event will include two GCTC-moderated sessions (Tuesday, Sept. 15, from 5:10 to 6:00 PM. and Wednesday, Sept. 16, from 9:30 to 10:10 AM) reviewing past successes and future plans of the GCTC program.*

### September 30-October 1: World Energy Engineering Congress, Orlando, Florida

*If you're planning on going to the World Energy Engineering Congress, Jason Handley is speaking at the Microgrid and Energy Resiliency panel. His specific topic will be, Load Optimization and it's scheduled from 2:30 - 3:00 PM.*

### November 3-5: SGIP Annual Conference, New Orleans, Louisiana

*Join SGIP in New Orleans this October for our Annual Conference. We've put together some of the industry's thought leaders for our panels and sessions, and arranged some amazing exhibitors for our guests. [Click this link to find out more about Annual Conference.](#)*

## Stay Connected to SGIP



Join Our Group  
On LinkedIn



FOLLOW US ON  
TWITTER  
@SGIPNews

You're receiving this because you subscribed from our website.

[Edit your subscription](#) | [Unsubscribe](#)

Smart Grid Interoperability Panel  
401 Edgewater Place, Suite 600  
Wakefield, MA 01880  
SGIP.org