



NIST Smart Grid Program

## SGIP Update


### Smart Grid Federal Advisory Committee Meeting June 3, 2014

**Paul Boynton** [boynton@nist.gov](mailto:boynton@nist.gov)  
**Dean Prochaska** [dean.prochaska@nist.gov](mailto:dean.prochaska@nist.gov)


Smart Grid and Cyber-Physical Systems Office  
 National Institute of Standards and Technology  
 U.S. Department of Commerce

## Smart Grid Interoperability Panel (SGIP) Background



- SGIP established by NIST in November 2009 as a public-private partnership
- Began transitioning to member-funded, non-profit organization SGIP 2.0, Inc. in Dec. 2012, operational April 1, 2013
- NIST and SGIP signed Memorandum of Understanding (MOU) in December 2012
- Cooperative agreement executed in April 2013
- As of 05/30/14, there are 193 members

NIST smart grid program 

## Recent and Upcoming SGIP Activities

- Ongoing: entries in Catalog of Standards, white papers, webinars.
- Membership Meetings:
  - First Inaugural Conference/Members Meeting in West Palm Beach, FL in November 2013
  - First Members Meeting in Denver, CO in May 2014
- New Priority Action Plans
  - PAP21 – Weather Information
  - PAP23 – Testing Profile based on Communication Networks and Systems in Substations (IEC 61850)
  - Proposed Microgrid PAP
- Upcoming Board of Directors strategic planning meeting in Atlanta

NIST smart grid program

engineering laboratory



## Smart Grid Architecture Committee (SGAC)

- Worked closely with European Union Smart Grid Coordination Group (SG-CG) to coordinate Smart Grid architectures on methodology and interoperability
  - NIST and SGIP close communication and monitoring of this priority effort as part of its international coordination
- Launched Transactive Energy Working Party (Business to Grid DEWG)

NIST smart grid program

engineering laboratory



## SGIP Technical Committee

- New Committee created in SGIP 2.0
  - Chair—John Caskey--NEMA
  - Strategic Technical Planning and Direction
    - Supports NIST's plan to evolve our Framework
  - NIST has 3 voting members on this committee
- Oversight of the SGIP technical activities including:
  - Oversight of the creation, maintenance and execution of the Priority Action Plan (PAP) process
  - Oversight of the Program Management Office (PMO) functions
  - Oversight of Standing Member Committees including:
    - Architecture Committee
    - Testing and Certification Committee
    - Implementation Methods Committee
    - Cybersecurity Committee
  - Oversight of the Domain Expert Working Groups and other working groups

NIST smart grid program

engineering laboratory



## SGIP Implementation Methods Committee (IMC)

- Supports NIST SG Program to accelerate smart grid deployments
- Chair—Don Von Dollen—EPRI
- Rebooted over the last year
- The IMC focuses on identifying, developing and supporting mechanisms and tools for objective standards impact assessment, transition management and technology transfer in order to assist in deployment of standards-based Smart Grid devices, systems and infrastructure
- IMC functions include:
  - Development of reports and guideline documents to be included and/or referenced by the SGIP CoS process
  - Migration Path Options for transitioning from legacy installed base or earlier version of a standard to a new standard, including technology transfer planning and supply chain implications
  - Identifying implementation lessons learned and best practice-- providing case study webinars to share experiences

NIST smart grid program

engineering laboratory



## SGIP Testing and Certification Committee (SGTCC)

- The SGTCC supports NIST's Testing and Certification focus on accelerating the development of industry testing and certification programs.
- Chair—Dean Prochaska—NIST
- SGTCC Functions:
  - Continue development and maintenance of the NIST Testing and Certification Framework to guide the development of smart grid testing and certification programs
  - Encourage, guide, and support emerging test programs in the implementation of SGIP recommendations, particularly the Interoperability Process Reference Manual (IPRM)
  - Carry out NIST's guidance to facilitate the prioritization of critical industry test program needs and provide leadership for SGIP action plans that address identified testing gaps and opportunities
  - Review Smart Grid standards proposed for inclusion in the Catalog of Standard relative to attributes relative to testing and certification programs

NIST smart grid program

engineering laboratory



## SGTCC (cont'd)

- Additional SGTCC activities in support of NIST Smart Grid Test Program:
  - Engage with end purchasers of systems/devices to help them understand testing and certification benefits, and support driving demand for these test programs
  - Develop outreach initiatives on testing, such as educational webinars, white papers and other means to promote the benefits of interoperability and value provided by certification programs
  - Collaborate with international Smart Grid testing and certification initiatives to assure alignment of operational frameworks where appropriate
- Current SGTCC Initiatives:
  - Pursuing the development of Priority Action Plans that address identified testing needs (e.g. distribution automation, smart inverters)
  - Based on NIST's guidance--- enhancing IPRM to incorporate lessons learned from implementation by emerging programs
  - Developing a Catalog of Test Programs as an industry resource
  - Webinars promoting the benefits of testing and certification
    - Utility case studies

NIST smart grid program

engineering laboratory

