

Documentary Standards Update: Smart Grid

NIST VCAT
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Smart Grid: Major Accomplishments

- ▶ **Smart Grid Interoperability Panel (SGIP) in execution mode**
 - ▶ 573 member organizations, with 1,558 member representatives.
 - ▶ Architecture and Testing/Certification Committees formed
 - ▶ Process for hand-offs of requirements to SDOs established
 - ▶ Project management process in place
 - ▶ Priority Action Plans (mostly) on target
 - ▶ Second draft of NIST IR 7628 (Cyber Security Guidelines for Smart Grid) published for public review
- ▶ **International engagement**
 - ▶ ISO, IEC, ITU-T, IETF participating in SGIP
 - ▶ Extensive interaction with Japan
 - ▶ Bilateral engagements with EU, Canada, Mexico, Brazil, Korea, China, Australia
 - ▶ Partnering with DOE on a multi-lateral intergovernmental International Smart Grid Action Network
- ▶ **Policy**
 - ▶ White House OSTP/NIST blog
 - ▶ New NSTC Subcommittee on Smart Grid Policy co-led by DOE and NIST
- ▶ **New NIST SG Federal Advisory Committee**
 - ▶ 45 high quality nominations received
 - ▶ Candidates going through vetting process

Smart Grid: Major Issues / Challenges

- ▶ Contention around standards for customer access to energy usage information
- ▶ Home Area Network interaction with the Smart Grid
- ▶ Competing EV standards for rapid charging
- ▶ Defining sound architectural principles for SG – just beginning, but needed yesterday. Potential overlaps emerging among IEEE, IEC, ITU-T, ETSI in developing architecture documents.
- ▶ Ensuring security aspects are considered at every level
- ▶ Stability issues as the grid decentralizes and loads and generation behave differently – research topic
- ▶ Architectural extension of “Smart Grid” to “Smart Infrastructure”

Smart Grid: Upcoming Events

- ▶ **Potential events of interest for the Committee**
 - ▶ NIST Participation in Japan Smart Grid Summit, Tokyo, June 18
 - ▶ Joint SGIP Governing Board meeting with National Association of Regulatory Utility Commissioners meeting in Sacramento, CA, July 17
 - ▶ Standards Panel at Grid Wise Global Forum, Washington DC, September 22
 - ▶ IEEE Conference on Smart Grid Communications, October 4-6, at NIST Gaithersburg
 - ▶ SGIP Meetings at Grid Week, October 18-21, Washington DC