

## SGAC Discussion Topics

### Transactive Energy

- After separating out policy-related components of this topic, are there technical or interoperability components for which NIST standards and/or research is needed?
- What would be pros and cons for considering a building-focused TE pilot that includes its interaction with the market? (Would such a pilot be unique? Are other pilot efforts at different organizations sufficient in this area?)
- Is a Green Button-focused activity or potential pilot useful to consider in this area?
- Are there additional needs for building control standards and international standardization to support future transactive-energy-based implementations?
- What other organizations in this area are potential collaborators?

### Resilience

- What are key resilience mechanisms and functionality needed to support grid operations?
- What are high priority areas for NIST work based on NIST expertise and capabilities (PMU, time synchronization, network modeling, etc.)?
- How do microgrids fit in this area?
- What are motivators for utilities and others to participate in the NIST disaster resilience framework development effort in relationship with the NIST smart grid program?

### Distributed Energy Resources

- What are drivers for DER?
- What are emerging as the most pressing technical challenges as the role of DER in the energy landscape changes?
- What research and/or experimental capabilities (including testbeds) are needed to address these technical challenges?
- What are high priority areas for NIST in DER?
- What are key “big-picture” factors that may facilitate future integration of DER (in the context of smart grid) and the larger topic of cyber-physical systems?

### Read Ahead Materials

- DOE Smart Grid System Report, see <http://energy.gov/oe/downloads/2010-smart-grid-system-report-february-2012>
- EPRI, The Integrated Grid, Phase I and II, see <http://www.epri.com/Our-Work/Pages/Integrated-Grid.aspx>
- Integrating Renewable Electricity on the Grid, see <http://www.aps.org/policy/reports/popa-reports/integelec-faq.cfm>
- Disruptive Challenges, EEI, see <http://www.eei.org/ourissues/finance/documents/disruptivechallenges.pdf>