IEEE-SA Smart Grid

25 October 2011
IEEE-SA Smart Grid Status

- Pre-standards activities
  - IEEE Smart Grid Visions for Communication, Power, IT, and Vehicular Technologies have all held their kickoff meeting.
    - Communications is in their second review of submitted draft text
  - Control Systems will hold their kickoff meeting 21 November
  - Long term visions of what the smart grid in each technology space will look like 20 to 30 years out.
  - SG Vision Projects are chartered with creation of forward looking use cases, applications scenarios for SG, and corresponding enabling technologies for SG of the future snap shots of years 2015, 2020, 2030, and beyond.
  - These are targeted to produce publishable products (long term vision, reference architecture model(s), and a technology roadmap)
  - 4 research group
    - Wireless vehicle charging – 10 November Melbourne
    - High voltage solid state transformers – Held its first meeting 21 September
    - Vehicles that don’t crash – planning startup stages
    - Nano and molecular communications - planning startup stages
IEEE-SA Smart Grid Status

Standards Acceleration


- 11 out 11 standards targeted for completion in 2011 are approved
  - expecting 5 more on the December Revcom agenda

Post-standards activities

- MOUs being explored
  - testing on syncrophasors
  - software for metering
  - communications networking devices for power systems.
IEEE-SA Smart Grid Status

International marketing and PR efforts

- IEEE-SA news being picked up in hundreds of news channels
  - Media Round tables in Japan, Korea, China
  - Presented at:
    - KEPIC Week (Korea), SGWF (China), SmartGrid Comm (Brussels), SmartCity Week 2011 (Japan)
    - Press Interviews (102), Press Events (7), Press Events Attendees (93), Media Coverage (unique)(389), Bylined Articles (81), Columns / Blogs (5), Analyst Briefings (10), Press Releases (26), Video Interviews(10)

- Form strategic partnerships; build collaboration and cooperation
  - MOUs signed
    - KATS
    - KSAE focus on Electric Vehicles
  - IEC
    - PAS 63547 (1547) Passed
IEEE and IEEE-SA

- IEEE smart grid web portal – Provide SA related content
  - Standards is second in most active hits
  - Standards linked to the interactive smart grid conceptual model
- IEEE Smart Grid Linkedin – Posting standards related news information
- IEEE Smart Grid Steering Committee meeting – Participate on bi-weekly teleconference
- IEEE SG Newsletter - Contributed articles
- TA technology life cycle and the SA standards life cycle harmonization
- IEEE Conferences – Provide speakers and standards related information where appropriate
- IEEE Public Visibility – Participate by providing information relating to standards
## IEEE Involvement in Priority Action Plans (PAP)

### Smart Grid Interoperability Panel

<table>
<thead>
<tr>
<th>Priority Action Plan</th>
<th>IEEE Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – Wireless Communications for the Smart Grid</td>
<td>IEEE 802</td>
</tr>
<tr>
<td>5 – Standard Meter Data Profiles</td>
<td>IEEE SCC31</td>
</tr>
<tr>
<td>6 – Common Semantic Model for Meter Data Tables</td>
<td>IEEE SCC31</td>
</tr>
<tr>
<td>7 – Electric Storage Interconnection</td>
<td>IEEE 1547 Series / IEEE 1679 / IEEE 2030.2 / IEEE 2030.3</td>
</tr>
<tr>
<td>12 – Mapping IEEE 1815 to IEC 61850 Objects</td>
<td>IEEE 1815/ IEEEP1815.1</td>
</tr>
<tr>
<td>13 – Harmonization of IEEE C37.118 with IEC 61850 and Precision Time Synchronization</td>
<td>IEEE C37.118</td>
</tr>
<tr>
<td>15 – Harmonize Power Line Carrier Standards for Appliance Communications in the Home</td>
<td>IEEE 1901/ IEEE1901.2</td>
</tr>
</tbody>
</table>