IEEE New Technology Development Committee

Smart Grid Conceptual Plan

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**Objectives**

- Organize, coordinate, leverage, and build upon the strength of IEEE and its Societies for Smart Grid
- Facilitate stakeholder interaction world-wide
  - Educate, coordinate and package existing products / activities
  - Provide new venues with smart grid focus interaction… through web tools, conferences, publications, education
  - Share best practices, understand regional differences
- Create awareness through public visibility efforts
- Bring various facets of IEEE together
- Facilitate external collaborations and alliances
- Increase revenue, membership
- Recognize window of opportunity – move swiftly
Smart Grid Situation

• IEEE risks being perceived as “irrelevant” because others have been more visible, nimble and involved longer.
• Prompt coordination needed to gain a foothold
  – Smart grid is an active topic that involves many areas
  – Parallel activity underway: multi-society, standards, policy, public visibility, education / training
• Implementation-focus is needed immediately
  – Highlight and build upon what works TODAY
  – Bring the technical voice to the policy table
  – Facilitate interaction, inter-operability, coordination
  – Identify and address gaps – promptly
  – Frame technical risks
Approach

- Smart Grid panel at PES ExCom
- IEEE society survey to identify activity / experts
- Create incubation team to leverage existing materials
  - Understand current activity and society owners: Standards, distinguished lecturers, transactions, experts...
  - Define and package existing products
  - Brand “smart-grid” materials
  - Organize outreach efforts
- Build structure to develop and coordinate
  - Publication and web tools
  - Interactions: conferences, blogs...
  - Education
  - Standards
  - Technology
Initial Incubator efforts

• Leverage existing materials
  – Promote availability of Smart Grid Video
  – Identify existing papers and materials
  – Create podcast capability and offer them regularly
  – Create web portal for easy GM access
• Increase visibility with a wider audience
• Formalize Smart Grid members’ relationships
• Develop a method to co-brand existing IEEE SG content
• Package SG standards as a bundled product
• Link to public domain business-use cases
- Guidance
- Outreach
- Feedback
- Visibility

**Phase I**
- Incubation Team
  - Leverage existing materials
  - Find quick-hits

**Phase II**
- Publication Team
  - Create
    - SG journal
    - SG portal
    - Blog tools
    - Clearinghouse
    - Glossy magazine
  - Facilitate the use of journal, portal, tools
  - Establish new conferences
  - Promote conferences, web tools, internally and externally

- Interaction Team
- Education Team
- Standards Team
- Technology Team
- TCC

- Tutorials
  - Speakers bureau
  - Plain Talk
  - Podcasts

- Standards development
  - External coordinat
  - Test criteria
  - Certify interop.

- Identify new areas
- Identify groups of mutual interest
- Highlight developments
- Recommend new areas
Publications and web tools

- Finalize approval and promote Smart Grid Journal
- Create a monthly gloss-magazine
- Build a clearinghouse web site
  - Capture related materials
  - Make them available to the public-at-large
  - NIST proposal in process
- Create follow-on smart grid videos and promote them
- Promote the use of Smart Grid IEEE co-branding
- Develop / build upon smart grid IEEE web portal
- Establish blog site(s)
Interactions: Conferences, blogs

- Use one or more blog sites to build a community
  - Drive new podcasts
  - Identify content for clearinghouse.
- Allocate smart grid sessions into existing conference
  - Validate road-mapping / standards development
  - Generate content for clearinghouse web-site
  - Build relations for blogging
- Establish multi-society boutique conferences
  - Policy makers and technical perspectives
  - Best practice promotion, case studies
  - Replicate by region, promote tools.
- Promote tools
  - Clearinghouse, podcasts, videos,
Education

- Create tutorials with CEUs
- Develop Plain Talk Smart Grid Series
- Create a GS Speakers Bureau
- Offer weekly podcasts
- Capture links in the clearinghouse
- Utilize blog activity to formulate additional content and identify interested parties
Standards

- Identify existing IEEE standards and PARS
- Participate in NIST sponsored road mapping exercise
- Utilize NIST roadmap to build-upon and base future standards activities
- Develop methodology for interoperability
  - Create testing definition
  - Establish scheme to validate and certify interoperability compliance
- Use clearinghouse for visibility of all related standards
- Work with SA to coordinate with other standards organizations to accomplish interoperability world-wide
Technology

• Create Technology Coordination Committee
  – Include members from various Societies, SA
  – National labs
  – Research consortiums
• Identify areas of advancement
  – Communications
  – Sensors
  – Batteries
  – Sustainable energy technologies
  – Security
  – Demand-response devices
• Exchange ideas on problems, advancements, research
• Develop highlights to showcase on web portal
• Recommend combined working groups
Coordinate and expand visibility

- Create a Stakeholder Executive Council
  - Promote existing offerings
  - Identify new areas of interest, vision
  - Map areas for collaboration
  - Collect developments
- Include policy review and coordination
  - Review position statements
  - Establish review rules before IEEE releases
- Establish co-branding policy, implement for related material
- Identify speakers / presence for conference, press releases
- Ensure technical voice is available for policy discussions
- Make policy discussion visible
- Identify and coordinate with external alliances
Next Steps

- Distribute Smart Grid Plan for comment 4/9
- Submit Clearinghouse proposal 4/13
- Implement Smart Grid Coordinating Panel 4/23
- Send Society President survey 5/1
- Consolidate feedback 6/1
- Assemble incubator team June
- Refine plan with short term deliverables June
- Launch Phase I at TAB - Series #2 6/24
- Receive Smart Grid Journal approval 6/24
- Define standards roadmap / gaps (EPRI) ??
- Launch standards activities ??
- Launch Phase II Feb 2010