

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 pod cast capability and offer them regularly
 - Create web portal fore 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

NTDC
Smart Grid

Executive
Council

- **Guidance**
- **Outreach**
- **Feedback**
- **Visibility**

Phase I

Phase II

Incubation
Team



Publication
Team

Interaction
Team

Education
Team

Standards
Team

Technology
TCC

- **Leverage existing materials**
- **Find quick-hits**

- 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**

- **Tutorials**
- **Speakers bureau**
- **Plain Talk**
- **Podcasts**

- **Standards development**
- **External coordination**
- **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