

New Technology Development Committee

Smart Grid

NTDC Smart Grid Meeting Summary
Calgary, Canada
30 July 2009

Participants:

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Shahidehpour, Bill Tonti, Mary Ward-Callen

NTDC Smart Grid Meeting Summary

- Background / Accomplishments
- 7/30/09 Meeting Summary
- Guidelines - Use NIST Model as a framework for all areas
- Organization
- Area Plans / Milestones
- Overall schedule
- Next Steps
- Meeting Objectives

NTDC Smart Grid Objectives

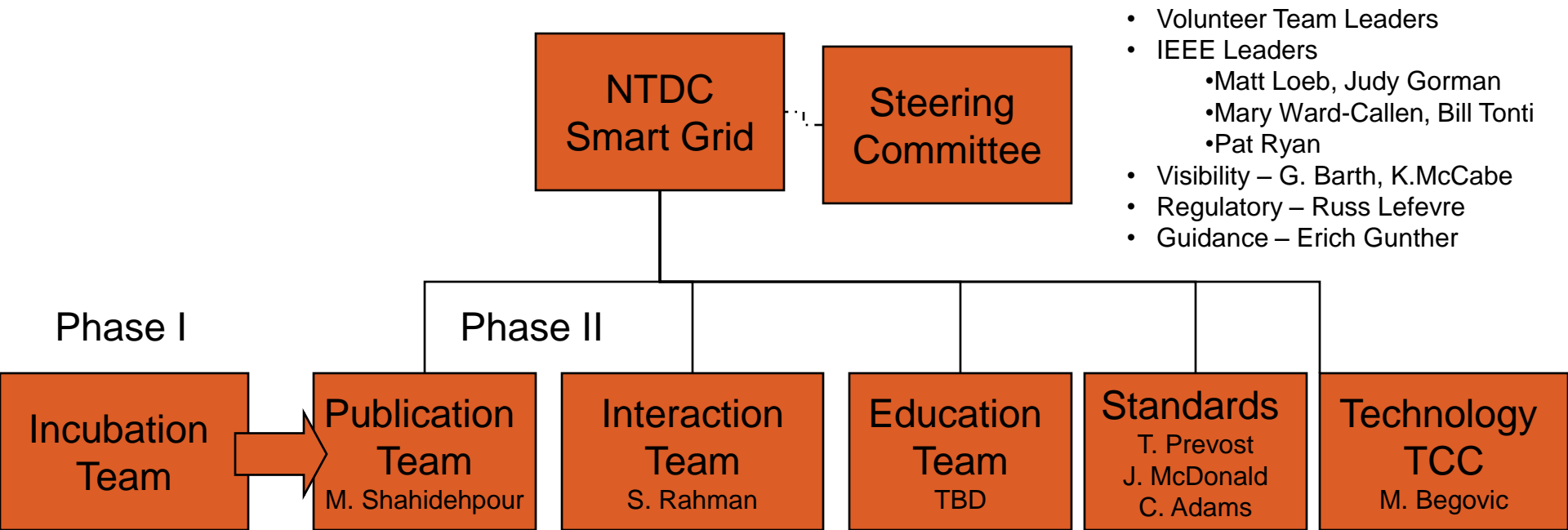
- Organize, coordinate, leverage, and build upon the strength of IEEE and its Societies for Smart Grid

- Requires:
 - Awareness through public visibility efforts
 - Internal and external IEEE collaboration
 - Prompt action
 - Facilitate world-wide stakeholder interaction
 - Educate, coordinate and package existing products / activities
 - Provide new smart grid venues ... through web tools, conferences, publications, education
 - Share best practices, understand regional differences

- Results are to increase revenue, membership

NTDC Smart Grid Approach

- Perform society survey for assessing activity / experts
- Create incubation team to leverage smart grid existing materials for early impact
 - Understand current activity and society owners: Standards, distinguished lecturers, experts...
 - Define and package existing products
 - Brand “smart-grid” materials
- Build structure to develop, coordinate across IEEE and its societies to have increased world-wide presence



- Volunteer Team Leaders
- IEEE Leaders
 - Matt Loeb, Judy Gorman
 - Mary Ward-Callen, Bill Tonti
 - Pat Ryan
- Visibility – G. Barth, K. McCabe
- Regulatory – Russ Lefevre
- Guidance – Erich Gunther

- 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
- Webinar

- Road map
- Standards development
- External coordinatn
- Testing critiera
- Interop. certification

- Identify new areas
- Identify groups of mutual interest
- Highlight developmts
- Recommend new areas

Accomplishments

- Created NTDC Smart Grid plan
- Smart Grid Summit held in Arlington, VA on April 23, 2009 in conjunction with the PES ExCom Meeting
 - Presentations <http://www.ieee-pes.org/smart-grid-forum>
 - Included: NIST, NEMA, IEEE SA, NRECA, PES, EPRI,
- Coordination calls held every two weeks
- Implemented TAB President Survey
 - <https://www.surveymonkey.com/NTDCCommitteSurvey>
 - Expanding participation based upon contacts received through survey results
 - Approximately 100 people identified across IEEE that are interested in Smart Grid
- Distributed smart grid flyer for Calgary conference activity

Accomplishments:

- Promoting video *"A Smart Grid: For Intelligent Use"*
 - Over 14,000 Hits on You-Tube
 - Part I: <http://www.youtube.com/watch?v=G5X5eOIs5bo>
 - Part II: <http://www.youtube.com/watch?v=9YGctpYw7qA>
- Implemented IEEE Smart Grid Press Release:
 - http://www.ieee.org/portal/cms_docs_iportals/iportals/about_us/news/2009/smart_grid_leadership_press_release.pdf
- Developed and using list of experts for Public Visibility
- Awarded Smart Grid Clearinghouse Contract with Virginia Tech
- Received approval for IEEE Transaction on Smart Grid
- Preliminary plans for Smart Grid Conference: Jan 19 – 21, 2010

Accomplishments:

- Providing NIST Roadmapping and IEEE SA P2030 leadership
- James Prendergast participated in the Smart Grid Leadership meeting at the White House
- Proceeding with IEEE P2030 Guide development:
 - Smart Grid Interoperability of Energy Technology and Information Technology Operation with the Electric Power System (EPS) and End-Use Applications and Loads
 - http://standards.ieee.org/announcements/intel_p2030.html
 - First meeting held June 3–5, 2009 at Intel in California
 - TF1 P2030 meeting held July 26,2009
- Awarded Phase II NIST Interoperability Contract with Enernex

Publications and web tools

- Finalize the approval of the Smart Grid Journal and actively promote it
- Create a monthly gloss-magazine featuring products and deployments that work today
- Build a clearinghouse web site
 - Capture related materials
 - Make them available to the public-at-large
 - DOE award in collaboration with Virginia Tech
- Create follow-on smart grid videos and promote them
- Promote the use of Smart Grid IEEE co-branding to earmark related publications and materials
- Develop / build upon smart grid IEEE web portal
- Establish blog site(s)

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IEEE Smart Grid Transaction



- Financial Co-Sponsorship:
 - IEEE Power & Energy Society

- Technical Co-Sponsorship:
 - IEEE Computer Society
 - IEEE Communications Society
 - IEEE Power Electronics Society
 - IEEE Industrial Applications Society
 - IEEE Industrial Electronics Society
 - IEEE Computational Intelligence Society
 - IEEE Signal Processing Society
 - IEEE Instrumentation and Measurement Society
 - IEEE Control Systems Society

- Received phase 2 approval
 - First issue in April, 2010

Publication - Transaction

- Develop well writing bibliographies -- look in March / April 09 P&E Magazine for authors.
- Outreach to 'others' like (Microsoft, Google etc.)
- First issue:
 - Focus around what is smart grid
 - Include a link in the web portal
- Create key words for Smart Grid
- Key Dates
 - Aug. 31 Manuscript Central is ready
 - Sept. Press Release for Publication
 - Sept. 21 Gridweek promotion
 - Dec. 31 Have invited papers
 - Jan / Feb Promote with 'tickler'
 - April Have promotion transaction at T&D
 - April First issue

Coordinate and expand visibility



- Create a Steering Committee
 - Promote existing IEEE offerings
 - Identify new areas of interest, vision
 - Map areas for collaboration
 - Collect developments

- Include policy review, coordination, viability
 - Provide technical voice for policy discussions
 - Review position statements
 - Make policy discussion and advancements visible

- Establish and implement co-branding policy

- Identify speakers for external conference, press releases

- Identify external alliances and collaborations

Visibility / Communications

- Create the branding / logo strategy
- Add article on PES e-newsletter for Smart Grid Standards activity
- Develop an annual communication plan that has a coordinated message throughout
 - Identify audiences and messages
 - Chapters, societies, readers, authors, reviewers, editors, think global, government / regulators, public
 - Work with Clasma
 - Inventory Society events to pull authors and promotions
 - Include Chapter engagement

- Key dates
 - Aug Get NIST Picture to IEEE Marketing
 - Aug Clearinghouse press release
 - Sept 21 Gridweek booth with video
 - Sept. IAS / PES ECCE
 - Nov. Grid Inter Op Conference
 - Dec. Globe Com, Super Computing
 - Jan Smart Grid Washington DC Conference
 - Feb Engineering Week
 - April North American T&D Conf and Expo.
 - April Semi Conductor Conference

Standards



- Create Standards Coordinating Committee
- Identify existing IEEE standards and PARS
- Participate in NIST roadmap and IEEE SA P2030
 - Build-upon existing standards, base future activities
 - Link with other standards organizations
- Develop methodology for interoperability
 - Create testing definition
 - Establish scheme to validate and certify interoperability compliance
- Use clearinghouse to increase visibility of all related SG standards and their relative applicability within the macro smart-grid scope
- Work with SA to coordinate with other standards organizations to accomplish interoperability world-wide

Standards

- Inventory existing material
 - IEEE SA provide scopes
- Target P2030 efforts toward NIST Gaps
- Communicate
 - Inventory of material
 - What is in / out of NIST Gaps
 - What is P2030 doing to address
 - P2030 committee voice-over-power point
 - Use NIST overview for drill down
 - IEEE Web Access
 - Maintenance plan (IEEE Staff)

Government Proposals

- NIST Phase I – Roadmap (nearly complete)
- Clearinghouse – ½ PEs FTE for two years
 - PES finds info and marketing. Send to VT. Point to IEEE landing locations.
 - EU – Ric DeDoncker
- NIST Phase II - SDO Coordination and Governance
 - IEC, NEMA (meter), ANSI, IETF...
 - Enernex submittal with IEEE, Clasma, UCA involvement. To be awarded by 8/15
- NIST Phase III
 - Testing certification (what is IEEE role)
 - Framework / lab certification
 - Think global
 - Who are the players (KEMA, Smart Grid Labs...)

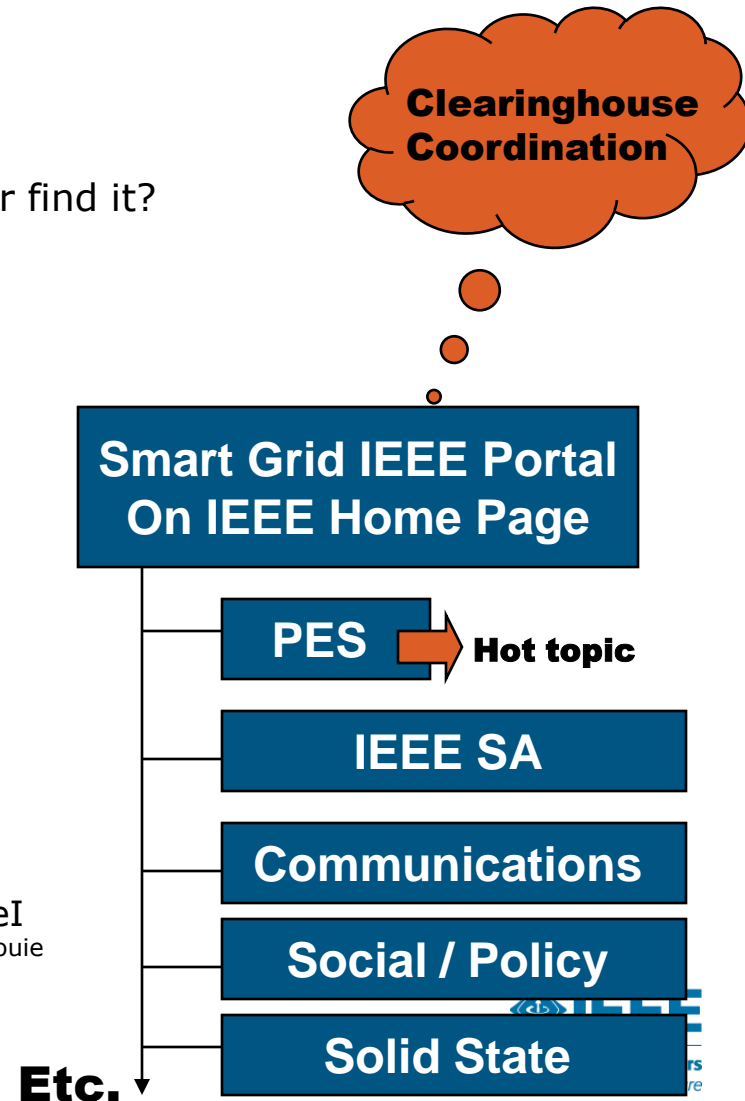
Interactions: Conferences, blogs

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- Use one or more blog sites to build a community of interaction. Discussion can drive new podcasts, articles, content for clearinghouse.
- Incorporate time for smart grid dialog into traditional conference settings to validate road-mapping, get feedback, generate content for clearinghouse web-site, build relations for blogging
- Establish multi-society boutique conferences bringing together policy makers, technical perspectives, and case studies. Highlight clearinghouse, podcasts, educational venues etc. Replicate by region, promote tools.

Portal / Tools

- Need content of abstract (solid PAR publicly available)
- Maintenance
- Determine tagging requirements
- How much content is in Xplore? Can an external spider find it?
- Possible content:
 - Clearinghouse coordination
 - What is on IEEE site that is not included
 - Press releases
 - Collaboration for blogs
 - Calendaring
 - Sign-up database
 - Live link to journal and Xplore
 - SA Gaps and working groups
 - Smart grid videos
 - What's new
 - NIST proposals
 - Experts
- Key Dates
 - Aug Get vendors / landing definitions
 - Aug Use PES Calendar function
 - Sept 1 Have presence on IEEE Home Page Phase I
 - Team - Bill Tonti, Pat Ryan, Matt Loeb, Carrie, Henry Louie
 - Phase II Society activity
 - Phase II Re-look at functionality
 - Phase II Develop branding strategy



Education

- Create tutorials with CEUs to be provided at conferences
- Develop Plain Talk Smart Grid Series
 - New modules
 - Incorporate messaging into existing offering
- Create a Smart Grid Speakers Bureau
 - Advertise SG website portal for others to use
 - Target multi-dimensions: policy, technologies, deployments, standards
- Offer weekly podcasts / webinars
- Capture links in the clearinghouse
- Utilize blog activity to formulate additional content and identify interested parties



Education / on Portal

- Use graphic overview (intuitive) to link in facts of IEEE
 - Think micro site like GE site
ge.ecomagination.com/smartgrid
- Plan audience / approach
 - Erich to donate smart grid 101 to get people up-to-speed
 - Develop series throughout the year
 - Drill into operations
 - Identify experts
- University curriculum
 - Content
 - Accreditation
 - Identify programs (IIT etc)
- NREL – possible education partner

Create database for names

- Identify
 - Listener
 - Contributor
 - Expertise
- Sources
 - Society responses ~ 100
 - UCA international user group list(s) and Intelligent Grid Coordination Committee ~1000
 - IEEE SA - P2030
 - EPRI / NIST list

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 the web portal and in the SG magazine

- Recommend combined working groups to address areas of mutual interest



Emerging Technology

- Hold a white paper conference focussed on new technologies – promote through NTDC
 - Gerry Fitzpatrick of NIST is interested
- Hold a winter meeting ??
 - Miroslav / Chris Root

Combined DRAFT Schedule

- 2009** – Aug Get NIST Picture to IEEE Marketing
- Aug Clearinghouse press release
- Aug. 15 NIST Phase II award
- Aug 28 Get vendors-landing def. for web portal (use PES Calendar)
- Aug. 31 Manuscript Central is ready
- Sept 1 Have presence on IEEE Home Page Phase I
- Sept. Press Release for Publication
- Sept. 21 Gridweek promotion, booth with video
- Sept. IAS / PES ECCE Conference promotion
- Oct. 1 Enernex donate Smart Grid 101 for initial education module
- Oct. 15 Database developed
- Oct. P 2030 meeting
- Nov. Grid Inter Op Conference promotion
- Nov. IEEE Board Series (report-out ??)
- Dec. Globe Com, Super Computing promotion
- Dec. 31 Have invited transaction papers
- Dec. 31 Phase II IEEE web portal?
- 2010** – Jan / Feb Promote transaction with 'tickler'
- Jan Smart Grid Washington DC Conference
- Feb Promotion IEEE Smart grid for Engineering Week
- March New Technology NTDC Conference
- April Have promotion transaction at T&D
- April First issue of Smart Grid transaction
- April Semi Conductor Conference