



# **OpenSG Closing Plenary Ft Lauderdale**

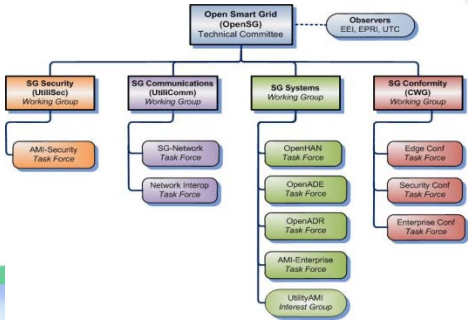
November, 2010





# Agenda

- SG Conformity
- SG Communications
- SG Systems
- SG Security
- SG Simulations
- Feedback
- Next Meeting





# SG Conformity





# SG Conformity

- Key accomplishments
  - Reviewed in detail IEC-9646-2 Abstract Test Case (ATC) process with a concrete example
  - Decision on organization for ATC suites and cases within suites
  - Timetable to continue Certification Process Reference Manual (CPRM) is 2 weeks from now (awaiting NIST SGIP TCC IPRM completion)
  - Decision to pilot IPRM using UCA 61850 testing process
- Next steps
  - Complete initial round of OpenHAN detailed test procedures for review
  - Upon completion of review, write remainder OpenHAN tests
- Next encounter data/time (tele./webinar/f2f)
  - Nov 17, 2PM EST (tentative)





# SG Edge/Enterprise Conformity TGs

- Key accomplishments
  - Agreed format and content for Abstract Test Case Documents
  - Worked examples for Enterprise and OpenADR test cases
  - Joint session with Network Interop - Discussed and agreed methodology for testing interoperability scenarios
- Next steps
  - Create Abstract Test Case documents for Enterprise, OpenADE and OpenADR + more work on OpenHAN – we have volunteers 😊
  - Review docs after initial work to ensure group agreement
  - Decide priority of implementation
  - Liaise with SG-Network to ensure we have all bases covered.
  - Finalize CPRM after SGTCC IPRM is released
- Meetings
  - Joint Edge/Enterprise meetings: weekly on Wednesdays at 10am Pacific





# SG Security Conformity TG

- Key accomplishments
  - Revise Charter and Scope
  - Revise Work Plan
- Next steps
  - Review documents for testable security requirements
    - OpenHAN, OpenADE, OpenADR
  - Collaborate with SGIP CSWG TCC to review CSWG AMI work
- Next Teleconference
  - To be announced via the listserv (after main Conformity meeting)





# SG Communications





# Network Interoperability TF

- Key accomplishments
  - Intro to Interop
  - Multi mac/phy HAN IETF Draft Review
  - AMI/HAN Interface Discussion
- Next steps
  - Scoping AMI demarcation effort
  - December calls







# SG-Network TF

- Key accomplishments

- Requirements work
  - Vetted approximately 500+ additional requirements across different network paths for Distribution Automation
    - Total requirements now exceed 3100
  - Vetted requirements for additional Distribution Automation
- System Requirements Specification
  - Latest version of the SRS was reviewed
  - Distribution Automation content was reviewed
- Database modeling tool
  - Modeling has become more sophisticated
  - Millions of meters can be simulated. The output has been tuned with a few deployments





## SG-Network TF

- Key accomplishments cont.
  - Joint meeting with SG-Security
    - Identified a process to map Distribution Automation requirements directly with security profiles
    - Lack of granular guidance for AMI functions (Meter Reading, etc)
    - NISTIR 7628 Document will still be used for Confidentiality, Integrity and Availability





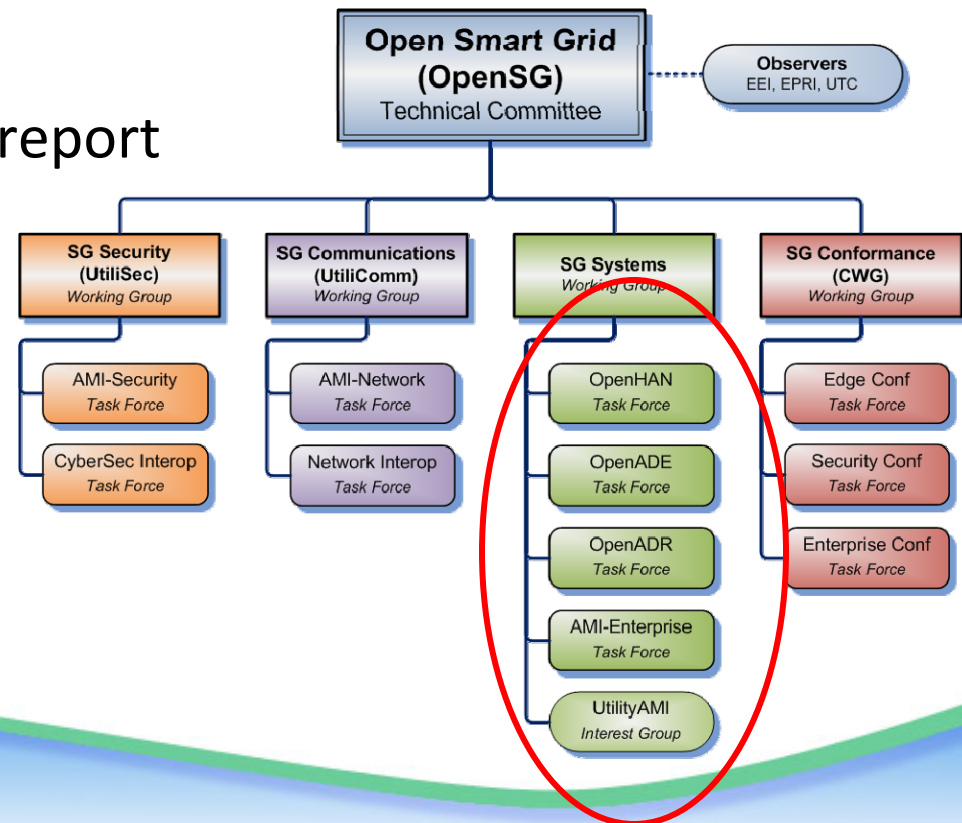
## SG-Network TF (continued)

- Next steps
  - Finish the System Requirements Specification redesign.
  - Finish requirements version 5
  - PAP 1 and PAP 2 are concluding (Support as needed)
  - Evolve database tool and educate potential users
- Next webinar: Monday November 15th 2pm EDT (Weekly meetings)



# SG Systems WG

- EIM (new) – Greg Robinson
- ADE – Dave Mollerstuen or Steven van Ausdall
- ADR – Albert Chiu or Ed Koch
- HAN – Erich Gunther
- AMI (between cycles) – no report



# Organization & High Level Status

**SG-Systems WG**  
 Chair: Brent Hodges  
 Co Chair: Greg Robinson

	<b>AMI-Ent TF</b> Chair: Mark Ortiz Co-Chair: Greg Robinson	<b>OpenADE TF</b> Chair: Dave Mollerstuen Co-Chair: Steve Van Ausdall	<b>OpenADR TF</b> Chair: Albert Chiu Co-Chair: Ed Koch	<b>OpenHAN TF</b> Chair: Erich Gunther Co-Chair: Mary Zientara
<b>Use Case Team</b> Chair: Kay Stefferud				
<b>SRS Team</b> Chair: Joe Zhou			About to Vote	
<b>Service Definitions Team</b> Chair: Jerry Gray Co-Chair: Shawn Hu		Collaboration With NAESB, IEC & OASIS	Collaboration With NAESB, IEC & OASIS	Collaboration With SEP 2.0 & IEC
<b>EIM</b> Chair: Greg Robinson Co-Chair:				
<b>SG Security WG</b>				
<b>SG Conformity WG</b>				



# Why EIM?

- The Smart Grid is about Smart Data
  - Too many moving parts & too much investment at risk - to go on doing “more of the same” IT practices
  - **Smart Data** Requires:
    - Planned Enterprise Information Management (EIM)
      - Based on an architecture with **strong interfaces**
      - Makes practical use of **industry standards**
      - Decouples projects
    - Architecture for incremental deployment over many years
      - Master Plan implemented in phases
      - Each increment must fit cohesively with previously installed components
    - Getting help by leveraging effective user organizations
      - Lowers costs and mitigates risks for nominal cost

–... and here we are!



# New EIM Task Force Kick-Off

- Discussed EIM fundamentals
- Roundtable to hear about experiences and expectations of members
- Formed strategy for doing useful collaborative work
- Established key points for charter
- Developed approach:
  - Biweekly meetings, initially focused on reviewing charter and establishing plans.
    - Prioritize use cases, allocate them to phases, and make assignments for phase 1
  - First draft Master Plan System Requirements Specification ready for review by next F2F
  - First draft Phase 1 Use Case Set ready for review by next F2f





# OpenADE

- Key accomplishments

- Status, Support of NAESB Energy Services Provider Interface (ESPI) – Standardization of OpenADE 1.0 Requirements
- 2011 Roadmap (draft)

- Next steps

- Support NAESB ESPI effort:
  - Determine, initiate appropriate ITCA for OpenADE / NAESB ESPI
  - ESPI sample implementation
- OpenADE 2.0 Requirements work to begin as ESPI 1.0 approaches finalization (Q1 2011)

- Next encounter data/time

- OpenADE Webconference: first Thursday of each month, 11a PT/2p CT







# OpenHAN F2F Accomplishments

**-no session this F2F**





# OpenADR TF

- Key accomplishments
  - Successful PAP09/OpenADR meeting
    - PAP09 updated by NAESB, OpenADR TF, Zigbee and OASIS
    - Reviewed draft OASIS EI TC draft document
      - Discussion on UML models
      - Discussion on different type of DR signals (price, level, DLC, etc.)
  - Reviewed and finalized OpenADR SD v.1.0 document
  - Established agreement on SD voting process
  - Start to define the scope of OpenADR SRS 2.0
    - Integrated Demand Response/Advanced load control
    - Gap analysis (SRS/NAESB- SD, SEP2.0 – SD, EITC – SD, etc.)





# OpenADR TF

- DER (4)
- Fast DR (3)
  - AS, PL, Regulation, etc.
- EVSE/EV (6)
  - Focus on charging station communication
- DR bidding (2)
- DR Forecasting (5)
- DR security design (1)
  - Focus on payload





## OpenADR TF

- Next steps
  - Recruit volunteer
  - kick off SRS 2.0 activities
- NAESB – Participate in Tiger team meeting on PAPs on December
- Engage with NAESB new DR/customer enrollment group
- Continue to work with NAESB, OASIS and Zigbee on PAP09
- Goals for next F2F meeting
  - Draft SRS 2.0 document





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# SG Security





# SG Security – Key Accomplishments

- Numerous updates on points of interface with external groups
  - IEC TC57 (Power Systems) WG15 (Communications Security)
  - NERC CIP Standards Drafting Team
  - NIST Cyber Security Working Group
  - Industrial Control Systems Joint Working Group (ICSJWG) Vendor Subgroup
- Usability Analysis Task Force
  - Resolved terminology issue with 3PDA Security Profile
- Support of SG Network / PAP02
  - Developed new approach to derive security controls for data payloads using Distribution Management Security Profile
- CyberSec Interop Task Force
  - In-depth review of work-in-progress for Syslog Interoperable Configuration Profile
  - Preliminary discussion of issues for LDAP






# SG Security – Key Accomplishments

- ASAP-SG
  - Review of organizational & work flow
  - Presentation of Security Profile Blueprint
  - **NOTE:** *Looking for utility participants for 2011!*
- Embedded Security Interest Group
  - Review and feedback on potential task areas & deliverables (strong engagement)
- In-depth discussions
  - Stuxnet
  - Vulnerability disclosure & information handling







# SG Security – Next Steps

- Usability Analysis TF
  - Post final position on 3PDA Security Profile
  - Post charter
- CyberSec-Interop TF
  - Assemble review team for IPSec Interoperable Configuration Profile (ICP)
  - Develop white paper on benefits of Syslog ICP for NERC CIP compliance
- SG Security WG
  - Communicate and discuss revised approach in SG Network – SG Security collaboration
  - Monitor developments in external groups: IEC TC57 WG15, NERC CIP SDT, NIST CSWG, ICSJWG
- Embedded Systems Security Interest Group
  - Propose tasks/deliverables and charter for task force
- Next webinar date/time
  - Monday, November 8<sup>th</sup> from 2-3pm EDT





# SG Simulations





# SG Simulations – Key Accomplishments

- Elected Officers

- Craig Rodine [EPRI]: co-Chair
- Mak MacKenzie [Starview]: co-Chair
- Win Cuthbert [PG&E]: Secretary

- List serv and recurring meetings set up

- Signup page:
  - <http://www.smartgridlistserv.org/cgi/wa.exe?LOGON=A0%3dOPENSG-SIMSWG&L=OPENSG-SIMSWG>
  - also visible on server home at <http://www.smartgridlistserv.org/>
- Meetings Tuesday, 11-12 Pacific Time, Bi-Weely





## **SG Simulations – Next Steps**

- Create Charter
- Get up and running with regular meetings
- Deliverables Defined





**Thank you!**

**Safe return!**

