Open Smart Grid (OpenSG) SG Conformity Security

February 4, 2010

SG Conformity Security TG

Sandy Bacik
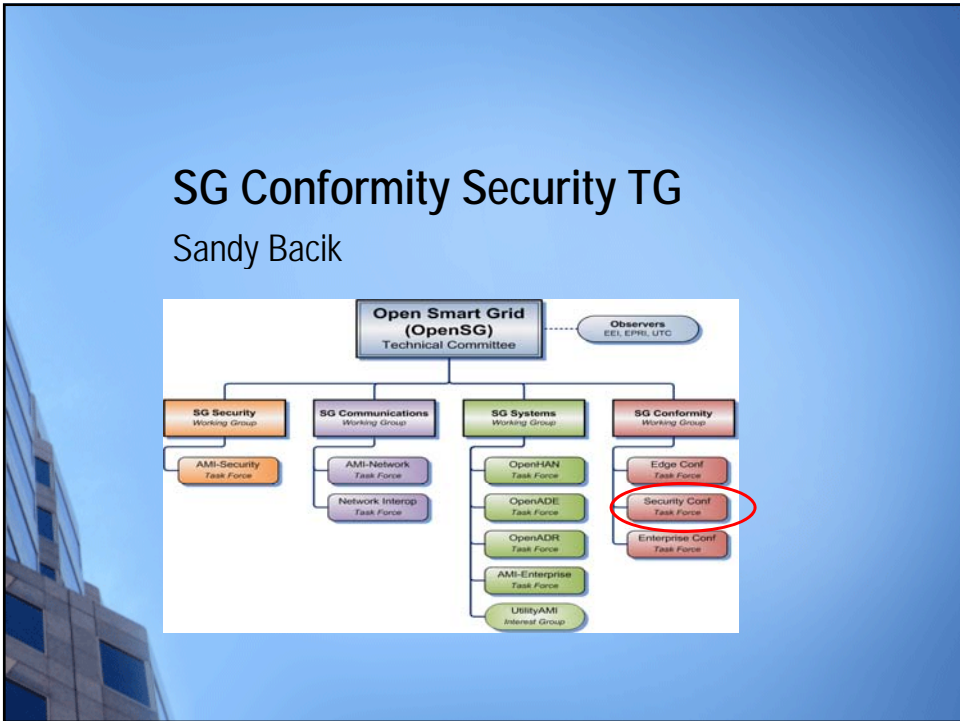
SG Conformity Security TG Charter

- Establish requirements for laboratories wishing to certify smart grid components and systems
- Establish clear scoping boundaries, perform research to identify existing models, and propose a high-level philosophy of approach

- Chair: Bobby Brown, EnerNex representing Consumers Energy, bobby@enernex.com
- Vice-Chair: Sandy Bacik, EnerNex, sandy.bacik@enernex.com

SG Conformity Security TG

Definitions:

Conformity Assessment –

- "has not been proven to be non-conformant with standard x" ~ Bruce Muschlitz
- "Is any activity to determine, directly or indirectly, that a process, product, or service meets relevant standards and fulfills relevant requirements." ISO/IEC Guide 2:2004

SG Conformity Security TG

Definitions:

Test Method - Is a definitive procedure that produces a test result. ASTM

- Qualitative (yes/no)
- Categorical
- Quantitative (measured value)

SG Conformity Security TG

SG Conformity Security TG
Agenda

- Charter and Work Plan approval by group
- Reviewing use case resources
- Use case walk through
  - Meter Read
  - Remote Connect / Disconnect
- Volunteers for tasks
  - Use case listing (business and/or technical)
  - Convert the business use cases to technical use cases
  - Making test cases from the technical use cases

SG Conformity Security TG

February 2010

SG Conformity Progress since Knoxville

- Set up Conformity and task groups for Security
  - UCAlug sites: OSGUG.UCAIUG.ORG/...
    - Conformity
    - Conformity/security
    - osgug.ucaiug.org/conformity/security
  - Mail lists: OPENSG-xxx@SMARTGRIDLISTSERVE.ORG
    - SGCONFORMITY
    - SGCONFORM-SEC
- Tasked SECURITY groups with their scope and charter

Slide 7   SG Conformity Security TG

Feburary 2010

Progress since Knoxville

- **Task Group established**
- **Weekly meetings established – Friday, 2:00 -3:00 EST**
- **Scope and Charter proposed**

Slide 8   SG Conformity Security TG

Feburary 2010

Proposed Objectives for 2010

- Q1/Q2
  - Develop a baseline set of use cases
  - Convert business use cases into technical use cases
- Q2/Q3
  - Develop abstract test cases based on technical use cases

Slide 9   SG Conformity Security TG

Charter

- http://osgug.ucaiug.org/conformity/security/Shared%20Documents/Forms/AllItems.aspx
- Let's walk through it

10

Work Plan

- http://osgug.ucaiug.org/conformity/security/Shared%20Documents/Forms/AllItems.aspx
- Let's walk through the tasks

11

Ready to Approve

- Charter
- Work Plan

12

Technical use case areas to focus

- Meter reads
- Remote connect /disconnect
- Meter replacement
- What others?

13

Security Test Cases

- Functions
  - Authentication, Authorization, Auditing
  - Integrity, Confidentiality, Availability
  - What else?
- Black Box / Grey Box / White Box
- Positive / Negative
- Unit -> Component -> System

14

Security Test Case Goals

- Interoperability
- Conformance with Standards
- Conformance with Vendor Claims

15

AMI use case resources

- SmartGridiPedia - http://www.smartgridipedia.org/index.php/Category:Use_Cases
- What other use case resources?

16

Use case meter read

- http://www.smartgridipedia.org/images/7/7a/ARCHB1USECASEv12050106.pdf
- Let's walk through the use case

17

Use case remote connect / disconnect

- http://www.smartgridipedia.org/images/a/a3/ARCHB2USECASEv12050106.pdf
- Let's walk through the use case

18

Volunteers

- Group to define high level conformity requirements
- Group to review use cases
- Group to review to place uses cases as technical or business
- Group to convert business use cases to technical use cases

19

Additional questions / comments

Thank you

20