

UtiliSecWG – Face-to-Face Meeting

Meeting Minutes

Thursday, April 16, 2009 – Miami, FL

Attendees (Indicated on sign in roster)

Albert Chiu/PG&E	Kevin Fennell/Landis+Gyr	Vilat Keomoungkhoun/Alcatel-Lucent
Austin Montgomery/SEI	Kurt Swanson/Entergy	Viola Lee/PG&E
Bobby Brown/EnerNex	Kyle Meadors/Drummond Group Inc.	Vishant Shah/EnerNex
Brad Bogolea/Greenbox	Larry Kohrmann/Oncor	Ward Pyles/Southern Company
Brad Johnson/Oncor	Lindani Phiri/Elster Electricity, LLC	Wayne Longcore/Consumers Energy
Bradley Singletary/EnerNex	Lizardo Hernandez/Landis+Gyr	Zahra Makoui/PG&E
Brian Smith/EnerNex	Mark Bonfiglio/Entergy	Bill King/FPL
Bryan Shang/Elster	Mark Freund/PG&E	Shelley Moister/Landis+Gyr
Chris Knudsen/PG&E	Mark van den Broek/Lockheed Martin	Jeff Gooding/SCE
Craig Rodine/Grid Net, Inc.	Mark Van Wyhe/PG&E	Tobin Richardson/ZigBee
Darren Highfill/EnerNex	Matt Gillmore/Consumers Energy	Robby Simpson/GE
Doug Houseman/Capgemini	Michael Echols/SAIC	Brad Johnson/Oncor
Eric Smith/Control4	Miguel A. Maseda/FPL	
Galen Rasche/SWRI	Neil Greenfield/AEP	
Gary Stuebing/Duke Energy	Nicholas DePetrillo/Industrial Defender	
George Cosio Jr./FPL	Rich Housh/Juice Technologies	
Gerald Gray/Consumers Energy	Robert Jepson/Lockheed Martin	Attending via telephone
Greg Dodson/Dominion Resources Services	Ruben Salazar/Landis + Gyr	Ka-Ping Yee/Google
James Ivers/SWRI	Russel K. Birdsey/Lockheed Martin	Howard Lipson/SEI
James McMurry/Milton Security Group LLC	Sandy Bacik/Sensus	Bryan Owen/OSIsoft
James Pace/Silver Spring Networks	Steve Heimlich/Crossroads Management Systems	Walter Sikora/Industrial Defender
Jeff McCullough/Elster	Tempe Lampe/Elster	David Jackson/Certicom
Jeremy McDonald/SCE	Terry Mohn/Sempra	Junaid Hossain/Florida Power & Kevin Walsh/OSIsoft Inc
John Lilley/SDG&E	Tim Enwall/Tendril	Matthew Campagna/Certicom
Josh Wepman/SAIC	Timothy DeLoach/IBM	Oliver Johnson/Tendril, Inc.
Julie Brown/Entergy	Tom Anthony/Oncor	

Summary

Darren Highfill provided an overview and status of the AMI-SEC TF and UtiliSec WG as well as a new effort called ASAP-SG. Darren also facilitated a brief discussion related to determining if privacy needed to be addressed by the group. Kyle Meadors of the Drummond Group provided an overview of Security Assertion Markup Language (SAML).

Documents

Documents are hosted on OpenSG SharePoint site.

Technical Discussion

Orientation and Review

Darren Highfill, UtiliSec WG and AMI-SEC TF Chair opened the session with a presentation covering the following:

- Mission, Purpose, and Objectives
- Status
 - AMI SSR Ratified December 2008
- Outreach / Engagements
 - NIST
 - NERC
 - NARUC
 - IEC TC 57 WG15
 - Discussion
 - Doug Houseman (Capgemini) - FERC has a draft statement/opinion out regarding AMI, HAN, and DR being covered by NERC CIP requirements
 - Joel Garman (FPL) - The load shedding requirement is 300MW. We already have one system which has been declared a critical cyber asset which is part of the distribution system.
 - Doug Houseman (Capgemini) - Suggests that all the listservs be pulled together in one place at the OpenSG level.
- Outreach / Engagements - External
 - Roadmap Document
 - Currently in limbo
 - Document is in the root section of the UtiliSec shared documents and needs to be reviewed and approved
 - One-pager Document
 - Needed and should include:

- Mission
 - Description of key deliverables
 - Aimed at non-security oriented people
- Discussion
 - Josh Wepman - Does one of those items relate to scope
 - Neil Greenfield - What about mission, vision, objectives, and deliverables
 - Darren Highfill - Considered this but concluded it was too much for one-page
 - Neil Greenfield - Can provide example where this has been done
- Outreach / Engagements - Internal (within OpenSG)
 - Has been informal and unstructured to date
 - Many active groups within OpenSG with security aspects
 - Dependency on verbal handoff
 - *Details collected by Darren Highfill in presentation online*
 - Neil Greenfield - There are SharePoint tools that can do this
 - Darren Highfill - We need to propose a mechanism to propose to the OpenSG Subcommittee on how this handoff should be done
 - Josh Wepman - Can you give us an example of requests in the past. What information is needed?
- Help Needed
 - UtiliSec Vice-Chair
 - Doug Houseman volunteered
 - Sandy Bacik volunteered
 - UtiliSec Secretary
 - Bobby Brown volunteered
 - **Action Item – Darren to send out announcement for UtiliSec Vise Chair and Secretary Nominations.**

ASAP-SG

Darren Highfill introduced ASAP-SG which will build upon the original ASAP effort to address security in the overall Smart Grid space. Details of the presentation on ASAP-SG follow.

- ASAP-SG Objectives
 - Split the AMI-SEC SSR into Smart Grid Security Spec (SGSS) and Risk Assessment and Security Profiles (RA/SP) for individual Smart Grid Applications
 - Improve the ability for users to approach, understand, and implement the guidance for securing smart grid systems
- ASAP-SG
 - Resources
 - Architectural Team

- Administrative Support
 - Utility Domain Experts
- Similar structure to ASAP
 - Participate via EPRI or directly
 - DOE provides matching funds
- \$3M/6 months
- These are still a draft at this point in time

- Discussion
 - Kurt Swanson (ENTERGY) - Have we talked to EPRI about TC opportunities? Utilities could get a theoretical 4/1 advantage with their money this way.

- ASAP-SG Deliverables
 - White Paper
 - Smart Grid Security Specification (SGSS)
 - Risk Assessment and associated Security Profiles (RA/SP)
 - Usability Analysis

 - Discussion
 - (unidentified person) - Is this prescriptive guidance? Shouldn't the vendors be included in the resources such as was done in OpenHAN?
 - Darren Highfill - At the end of the day, it should be the utilities that decide what the document says but they should have a vested interest to work closely with the vendors?
 - (unidentified person) - Would a good place for that be in the Usability Analysis
 - Josh Wepman - Does the Usability Analysis come at the end of the \$3M or is it iterated throughout?

- Future RA/SPs beyond AMI
 - *Details collected by Darren Highfill in presentation online*

 - Discussion
 - Brian Smith - Can we set the modularity and priority at the subcommittee level? This would help all the working groups to stay in sync with one another.
 - George Cosio - We need to have a control center view point as we may not be using a model with the vertical silos as we do now.
 - (unidentified person on phone) - Do we need to get more granular (i.e. more than just DA)
 - Neil Greenfield - Need to include network
 - Josh Wepman - Intelligrid defines something similar
 - (unidentified person) - DA needs to include the substation
 - George Cosio - Once we develop a network model, we want to use it for multiple applications.
 - Neil Greenfield - A lot of this can be identified using FCAPS.

- Beyond ASAP-SG: Assurance
 - Certification
 - Discussion
 - Doug Houseman - Do you really want the legal liability?
 - Darren Highfill - Have seen this in other areas where products have been certified to a specific standard at a specific time.
 - Neil Greenfield - These are two different issues: Vender certification and Business Process certification.
 - (unidentified person on phone) - How do you keep up with certification?
 - Neil Greenfield - This is moving into change management.
- Smart Grid Security Specification (SGSS)
 - Understandable and user-friendly framework, set of tools, and methodology
 - Generalized security requirements
 - Target audience is normal level of utility security experience
 - Create a useable and actionable set of policies and procedures
 - Discussion
 - Josh Wepman - Is the SGSS a list of all the stuff you would do?
- Tailored AMI Risk Assessment and Security Profile (RA/SP)
 - Prescriptive and actionable guidance for how to build-in and implement security for the smart grid
 - Tailored to a set of specific smart grid functionality
 - May be further decomposed into use case families and individual business functions
 - Agnostic to vendor, implementation, and architecture
 - Target audience is normal level of utility security experience for system owners, AMI system implementers and security engineers
 - *Bobby Brown provided an overview of the AMI RA/SP draft document.*
 - Discussion
 - George Cosio - Lets model with the most critical assets in the center of the diagram (i.e. control centers).

Technology for Consideration: SAML

Kyle Meadors of the Drummond Group provided an overview of Security Assertion Markup Language (SAML).

Privacy Issues

Darren Highfill posed a question to the group on if there is a need to develop a UtiliSec position statement relating to privacy? Details of the ensuing conversation follow.

- Doug Houseman - The privacy rules vary from country to country and sometimes state to state (in the US). The utility may take on additional liability (i.e. HIPPA is utility maintains data on who has life support). Baseline requirement would be "You share nothing with anyone at anytime"
- Vishant Shah - Should invite at an early stage civil liberties groups.
- (unidentified person) - Security does not equal privacy. Perhaps education and guidelines for classification would make it easier for utilities to develop their individual guidelines.
- (unidentified person) - If we focus on guidelines for classification, it allows every utility to determine how to classify their own. Am concerned about making blanket statements or establishing a baseline. It should be up to the utility.
- (unidentified person) - Opposed to it due to the liability of if I am caught not doing it and was a member of this group.
- Doug Houseman - Should just reference existing key documents.
- (unidentified person) - I do think there could be an agreement where bringing in privacy groups would be beneficial.
- (unidentified person) - Privacy seems to be a legal issue rather than a security issue. We should be focused on confidentiality.
- Vishant Shah - The role of the privacy organizations would be to advise the utilities on the issues they would want to address.
- (unidentified person on phone) - There may be privacy and security tradeoffs in the implementation.
- (unidentified person) - Point out that there is one area that touched on privacy in the AMI RA/SP draft.

Upcoming Meetings

Face-to-Face:

- July 14th-16th hosted by AEP in Columbus, OH
- October 20th-22nd hosted by EnerNex in Knoxville, TN

Teleconferences

Thursday, May 7 at 2:00pm EDT

Thursday, May 28 at 2:00pm EDT

Thursday, June 18 at 2:00pm EDT

Thursday, July 2* (two week span) at 2:00pm EDT