

Meeting Minutes April 27th, 2011

Members

Erich Gunther, EnerNex Corporation
Ron Ambrosio, IBM T.J. Watson Research Center
Robert Burke, ISO New England
Ward Camp, Landis + Gyr
Tony Giroti, BRIDGE Energy Group, Inc.
Amr Ibrahim, Ohio Consumer Council
Wayne Longcore, Consumers Energy
Tracy Markie, Engenuity
Bob Saint, NRECA
Ken Wacks, consultant to Sensus Metering Systems Inc.

Support – Pacific Northwest National Laboratory (PNNL)

Ron Melton, GWAC Administrator
Todd Halter
Ron Jarnagin
Sherry Kowalski
Steve Widergren

Speakers and Guests

Jeffery Taft, Cisco
Sue Swan, Consumers Energy

Call to Order

Erich Gunther

Erich Gunter called the meeting to order at 9:15 am.

Mike Coop, Think Smart Grid
Dave Elve, Sensus
Doug Houseman, Enernex
Munenori Kajiwara, Kajiwara IT Consulting, Inc.
Mark Knight, Grid Applications
Randy Lowe, American Electric Power
James Mater, QualityLogic
Yifung (Bess) Ng, Next Energy
Jon Rappaport, USNAP Alliance
Jerry Iwachiw, Petra Solar
William Cloutier Jr.-DTE Energy
Stephen Amsbary
Jon Rappaport, USNAP Alliance
Anto Budiardjo, Clasma Events

Members – not present

Rik Drummond, Drummond Group
Alex Levinson, Lockheed Martin
Tom Sloan, Kansas State Legislator

Members Emeritus

Welcome

Sue Swan, Consumer's Energy, Vice President of Smart Grid Development

Sue Swan welcomed the council and provided a snapshot of Consumers Energy's investment and commitment to smart grid and grid activities. Consumers Energy started working on smart grid implementation in 2007.

Proprietary Information Notice

The members and guests were reminded of the proprietary information disclosure policy according to the bylaws.

Administrative Business

Ron Melton, GWAC Administrator & Erich Gunther

Ron Melton reviewed the recording notice and agenda. Erich Gunther asked for any changes or additions to the agenda. Ken Wacks added that Mladen's Communications, Education, and Marketing working group at SGIP is writing a flyer on interoperability and would welcome comments from GWAC.

Erich Gunther stated that the February and March minutes have been distributed for review and opened the floor up for a motion. Ron Ambrosio moved to approve February minutes as presented, Ward Camp seconded the motion and the motion was carried. Ron Ambrosio moved to approve March minutes as presented, Tracy Markie seconded the motion and the motion was carried.

Action: February 11-12, 2011 and March 23, 2011 minutes were approved as presented.

Meeting Introduction-Theme

Ron Melton, GWAC Administrator & Erich Gunther

Erich Gunther stated the theme for the remainder of the year's meetings is to focus on elements associated with the top most layers of the GWAC stack. The overall vision will be discussed April 28th during the "Smart Grid Manifesto" discussion.

Ron Melton reviewed the GWAC calendar and upcoming events.

Upcoming Events:

- Transactive Energy Workshop will be held in Redwood Shores, CA on May 18-19, 2011
- Connectivity Week will be held in Santa Clara, CA on May 23-26, 2011
- SGIP meeting will be held July 12-14, 2011 in Montreal, Canada
- Webcast meeting on June 15, 2011
- Webcast meeting on August 17, 2011
- GridWeek will be held September 12-15, 2011
- GWAC F2F will be held in Phoenix, AZ on October 18-19, 2011
- Gridwise Global Forum will be held in Washington, DC on November 7, 2011

- Grid Interop will be held in Phoenix, AZ on December 5-8, 2011
- GridWeek Asia will be held in Mumbai, India in January 2012

Ron Melton reviewed the participants and purpose of the Transactive Control Workshop that will take place in Redwood Shores May 18-19, 2011. Erich Gunther inquired about the use of materials shared and produced at the workshop. Ron Melton mentioned to be thinking about smart grid as an end rather than a means to end. In previous discussions with Eric Lightner from the Department of Energy (DOE) it was mentioned not only does he want us to be a sounding board, but also a venue to provide sound advice. The information and materials produced at the workshop will result in a collective white paper which will be available as a resource document.

Interoperability Maturity Model Update

Steve Widergren

Steve Widergren reiterated the smart grid Interoperability Maturity Model's (IMM) purpose, which is how do we organize or structure the smart grid to obtain interoperability and provide a status update on the progress made since February. Group discussion continued regarding the IMM being interface oriented rather than enterprise oriented. Further discussion continued referencing Robert Metcalf's law which states the "value" or "power" of a network increases in proportion to the square of the number of nodes on the network, or referring to the IMM, the values squares with the size of the integration.

Grid-Interop 2011 Planning and Theme

Todd Halter

Todd Halter discussed the planning committee, program committee, and the Plug-In committee for the 2011 Grid-Interop. The tracks and leads are as follows:

1. Business and Policy – Amr Ibrahim
2. Architecture – Tony Giroti
3. Connectivity – Tracy Markie
4. Cross Cutting – Bob Saint

Some of the essential planning leaders have been identified, but homework needs to take place on the session topics. Ron Melton shared that he would like to solicit for specific papers rather than sending out a call out for generic papers.

Plug-In leads are Wayne Longcore, Erich Gunther, and Stuart McCafferty. The Plug-In will have three zones.

- New Zone – Experimental but vendors are aware of the difficulty
- Evolving Zone – The physical and entrepreneurial side
- Mature Zone – larger vendors, clearly demonstration value

Erich Gunther explained the logic for the three zones is to establish a level of vendor expectation. For example, the vendors in the New Zone are expected to exhibit failures as well as successes. Discussion continued about non-disclosure agreement to protect the results and to insure the vendors would be viewed in a positive light.

Additional planning is needed to figure out how to fund the full-up approach of the Plug-In. Discussion continued on several less expensive ideas.

Lunch Speaker

Jeff Taft-Cisco

Jeff Taft provided a presentation highlighting the role Cisco plays in the smart grid and explained some of this projects that he is involved in.

- Cisco developed a reference model to help figure out where their products could apply. The horizontal bands are communications channels. The reference model expands into architectures for specific sub-elements, for example, substation architecture.
- Cisco did a threat analysis for the types of networks used in electric utilities starting at the Application Specific Integrated Circuit ASIC level. Over 1,500 treat exposures were identified from the analysis.
- Cisco has been working on the PMU Network with NASPI and recently did a demo at the NASPI meeting in Texas. Cisco used off-the-shelf equipment and standard protocols and achieved very high performance. (For example used a version of multi-cast.)
- Created a “smart grid core functions stack” – analyzing to understand which pieces can live in the network and which cannot.
- By an acquisition, Cisco obtained a home energy controller (CGH-100). A similar building energy management product was also obtained via an acquisition.

GWAC Interoperability Constitution Re-Socialization Status

Ron Jarnagin, PNNL

Ken Wacks explained that he and other council members received feedback from the regulators. Many regulators had difficulties understanding the constitution items because of the Old English style wording. In response to this feedback, Ken Wacks and Robert Burke have reviewed and edited the GWAC constitution for content, grammar, and style to make it more approachable. In addition, they created an introduction for each section, explained interoperability and included consumers. There was no attempt to change the meaning of the items.

It was agreed that a new version which clearly denotes the new articles and changes will be sent out to all the Council members for review. Changes and comments are to be sent to council Ken Wacks and Robert Burke, (with a copy sent to Ron Melton and Sherry Kowalski) by June 1, 2011. The comments will be discussed and voted on June 15, 2011 at the GWAC web meeting.

Connectivity Week Planning

Ron Melton, GWAC Administrator

Ron Melton updated the Council on Grid Interop planning. Overall, much of the focus is on the consumer dimension.

As of today, the Environmental and Reliability tracks have speakers confirmed. The Economic/Regulatory track only has one speaker confirmed. Ward Camp volunteered to assist with locating speakers for this session. Ron Melton is to contact Amr Ibrahim to inform him of this development. Tony Giroti has a suggested speaker for the Economic/Regulatory session

and will forward the information to Ron Melton to review. Two more speakers are needed for this session.

GWAC members participating in Connectivity Week 2011 consist of Ken Wacks, who is organizing a session on the merger of the EPRI and U-SNAP alliance appliance interface work. Also, Tony Giroti is organizing a session on the role of IT in smart grid with investors and entrepreneurs.

FERC Technical Conference Comments

Ron Melton, GWAC Administrator

Ron Melton led a discussion regarding the Federal Energy Regulatory Commission (FERC) Technical Conference Comments. Ron Melton read a number of the comments and shared their sources.

Bob Saint informed the council that the National Rural Electric Cooperative Association (NRECA) submitted comments jointly with American Public Power Association, (APPA). APPA drafted the comments and NRECA heavily edited them. There was a criticism of GWAC's Decision Maker's Checklist – in particular the assumed lack of commitment if one didn't attend GWAC meetings, which implies a commitment to interoperability principles.

Additionally, there was criticism relating to participation with the Smart Grid Interoperability Panel (SGIP). The concern was that FERC might mandate GWAC's Decision Maker's checklist based on the GWAC comments.

GridWeek Planning: The GWAC Interop Workshop

Bob Saint

Bob Saint provided an update on the GWAC Interop workshop at GridWeek. The target audiences are utilities and regulators; NARUC is involved in bringing the regulators to the event. GridWeek will be shortened by one day because there is no longer a track which focuses on GWAC tools. It now focuses on GWAC messages regarding interoperability and is meant to be interleaved and put in context with each of the overall topics. Ron Melton mentioned that we need to keep in mind the new target audience and adjust how the GWAC messages are framed with this new way of organizing the discussion.

Outreach and Liaison Update

- NARUC – Erich Gunther
 - Erich is working with NARCU on GWAC doing some webinars on our various documents
 - Robin Lunt and possibly others are reviewing the list of candidate topics
 - Could be as soon as eight weeks
 - Example: smartgridvideo.tv has an example
- GridWise Alliance – Ron Ambrosio
 - Interop and cyber working group are trying to finalize the alliance principles on interoperability and cyber security. Now there are two separate documents and

- in the process of being cleaned up so they can use them in discussions with other organizations.
- Ron expects them to ask GWAC to review the material.
 - Dave Elve is on the implementation working group. He is going to help prepare some case studies that may be useful to GWAC.
 - There are also a couple of policy working groups.
 - EPRI Intelligrid (note that Joe Hughes has left EPRI and is working as an independent consultant) Planning to get some new people involved with GWAC.
 - UCA UG – Erich Gunther
 - Main thing is the coordination on the Plug-In.
 - CIM Interop just occurred.
 - GWAC's Interop principles have always been embraced by the UCA.
 - IEEE SG 2011 material incorporates much of the GWAC material. There could be a 300 level course more specifically focused on the GWAC material. We need to designate an IEEE liason.
 - ISO / IEC JTC1 – Ron Ambrosio
 - Next meeting on special working group on SG is on May 24.
 - Will be setting up monthly calls leading up to the JTC1 plenary meeting in the fall.
 - Working on a list of standards (existing) that are smart grid related. They are looking at the existing work plans to identify these standards and will propose them for inclusion in SG3's list.
 - ISO / IEC JTC1/SC 25/WG 1 – Ken Wacks
 - Meeting is in Berlin, Germany next week.
 - Three smart grid related standards are being written.
 - Expect heavy involvement by Europeans. Also expect Japan, China, and Korea. Ken Wacks is the chair of the committee and Ron Ambrosio is the leader of the US delegation.
 - The ISO/IEC 18012, part 2 interoperability standards has passed final committee draft vote. There were 30 comments that Ron hopes to resolve next week. The final draft international standards will then be voted and published.
 - Utilimetrics – Dave Elve
 - Utilimetrics is a trade organization.
 - They are always looking for ways to provide educational opportunities to utilities. There may be an opportunity to get GWAC material out through them.
 - They have a conference in September – we may still be able to get a speaking slot.
 - ASHRAE – Tracy Markie and Ron Jarnagin

- Tracy Markie and Ron Jarnagin provided a recap of the ASHRAE's winter meeting.
- Discussion took place regarding whether there is an opportunity to do anything at the summer meeting.
- Continental Automated Buildings Associations (CABA) - Ken Wacks wrote an article about the United States federal government support for smart grids including the work by GWAC. The article will be published this summer in the CABA magazine, "iHomes and Buildings." It will be available at no charge at caba.org under "magazine" in PDF format.
- Jan Beecher at Michigan State is starting a series of webinars for State Commissions for commissioners on smart grid regulatory issues. Doug Houseman is in contact with him.
- LonCom – The Lonworks community sponsors held at MacDonald's Hamburger University. Tracy Markie is heavily involved. Will occur the week after next, May 11-12.

Adjourn

The meeting adjourned at 5:40 pm.