

Meeting Minutes October 20, 2011

Members

Ron Ambrosio, IBM T.J. Watson Research Center
Rik Drummond, Drummond Group
Alex Levinson, Lockheed Martin
Bob Saint, NRECA
Ken Wacks, consultant to Sensus Metering Systems Inc.
Erich Gunther, EnerNex Corporation
Tracy Markie, Engenuity
Robert Burke, ISO New England
Wayne Longcore, Consumers Energy

Support – Pacific Northwest National Laboratory (PNNL)

Ron Melton, GWAC Administrator
Todd Halter, PNNL
Sherry Kowalski, PNNL

Speakers and Guests

Dave Cohen, Infotility
Gerald Fitzpatrick, NIST
Klaus Bender, UTC
Anto Budiardjo, Clasma Events
Dave Elve, Sensus
Leonard Tillman, Balch & Bingham LLP
Dave Wollman, NIST

Members – not present

Tom Sloan, Kansas State Legislator
Ward Camp, Landis + Gyr
Amr Ibrahim, Ohio Consumer Council

Members Emeritus

Richard Schomberg, EDF

Proprietary Information Notice

Ron Melton read the proprietary information disclosure policy according to the bylaws to members and guests.

Administrative Business

Erich Gunther

Erich Gunther called the meeting to order at 9:18 a.m.

Ron Melton reviewed the agenda, discussed the changes, and asked of any additions.

Minutes from the web meeting that was held on August 16, 2011 were presented to council via e-mail and no comments were received. Ron Ambrosio moved to approve the minutes, Robert Burke seconded the motion. The minutes from August were approved.

Ron Melton reviewed the calendar for GWAC meetings and upcoming outreach dates:

Upcoming Events:

- **November 8-10, 2011:** Global Forum Week
- **December 5-8, 2011:** Grid-Interop 2011
- **January 15-18, 2011:** IEEE PES SGT Conference
- **January 16-18, 2012:** GridWeek Asia
- **February 5-8, 2012:** NARUC Winter Meeting
- **March 27-29, 2012:** Possible TEW Dates
- **May 21-24, 2012:** Connectivity Week

The new meeting schedule was reviewed and discussed. The January web-meeting will be moved to the week of 25th due to conflicts. Erich Gunther offered his facility in Knoxville, TN for an upcoming face-to-face meeting. Ron Ambrosio suggested the IBM facility in New York for the Transactive Energy Workshop or a future face-to-face meeting. A suggestion was made to move the San Diego meeting to August.

Robert Burke recommended the calendar slide be sent out to all the council members.

Dave Elve is on the Implementation Working Group for Global Forum Week and would be willing to suggest that the working group take input from GWAC. It is too late for input this year's forum but is something that could be potentially feedback for next year's forum.

Ron Melton recommended that since the GridWise Alliance has had some management changes the Council needs to invite the new leader to the next GWAC face-to-face meeting to give an update on the GridWise Alliance's current projects.

Meeting Introduction

Erich Gunther & Ron Melton, PNNL, GWAC Administrator

Erich Gunther discussed the evolution of GWAC's role in the industry. Questions continue to arise from the smart grid community as to what GWAC's role is within the community, who are the primary customers, and what are GWAC's core philosophies. Erich Gunther asked the council to discuss ideas on what GWAC's organization and formal role should be and how that would best inspire interoperable solutions within the smart grid community.

One example discussed was past Council members Rik Drummond, Erich Gunther, and Alison Silverstein conducted formal commissioners meetings. This endeavor stopped, but perhaps GWAC needs to revisit the outreach opportunity. GWAC was conducting overt outreach with the Department of Energy and other industry outlets.

Ken Wacks shared the feedback he received regarding the Interoperability Constitution survey.

Erich Gunther suggested that GWAC needs to be seen as an advisory body and also show GWAC is here to offer interoperability assistance. Dave Elve suggested hosting webinars to demonstrate how people are using the tools that GWAC is creating. Many of these webinars are free and Dave Elve stated he would help in this endeavor.

Erich Gunther recommends the council to review existing documentation regarding the GWAC role to evaluate and see if we are meeting the expectations. This documentation is posted on the website and share point. Erich Gunther acknowledged the Council is currently not fulfilling the strategic role to make smart grid interoperability possible and is looking for suggestions on ways to reinvigorate the council.

Tracy Markie recommended GWAC concentrate on educating the end benefactors on the benefits of interoperability. It seems like the end benefactors are those that are least involved but these are the people that can create the economic pull and the demand for interoperability. And without them there would be no reason for the vendors to implement interoperability. If Interoperability is one of the Council's core goals then perhaps the council should look at the opportunity to create discussion and education for those outlying groups.

Ron Melton reminded the council that one reason we do not reference utilities in the constitution is because the way the future may provide energy to the end-user could have radical changes in the future.

Discussion continued about interchangeability, interoperability, and the fear that some manufactures have about their product being easily replaced.

Erich Gunther suggested the Council find a way to make it known that GWAC is available to provide a technical role in supporting legislative staff in deciphering energy bills. Ron Melton Mentioned that GWAC needs to be careful how our technical input is received and make sure it is not misconstrued as lobbying.

Bob Saint added that there are technical aspects that many lobbyists do not know. He concurred that it is indeed a fine line; however there is a need and an opportunity to educate.

Dave Wollman suggested that a safe way to promote the work of the council might be to assist Eric Lightner and The Smart Grid Task Force. The Smart Grid Task Force is interested in the role the federal government could take in driving smart grid implementation. It's a broad enough venue that if you are worried about lobbying, this might be a way to provide technical advice or be a tool that Eric Lightner and the DOE can use without misinterpretation.

Actions: Ron Melton to contact Eric Lightner to discuss possible Smart Grid Task Force involvement.

GWAC members to review existing role and vision document on SharePoint and website.

Grid-Interop 2011 Planning /Boot Camps

Todd Halter, PNNL

Erich Gunther shared that the planning committees are working hard to make sure we have an exciting Grid-Interop 2011. Over ninety abstracts have been submitted.

Todd Halter took the council on a tour of the Grid-Interop website and reviewed the agenda. GWAC is putting on a boot camp on Monday, December 5 that is targeted to regulators. The boot camp will cover what interoperability means. Dave Elve suggested we record the boot camp for future reference.

GWAC is hosting 5 boot camps. The boot camps are intended to be 90 minute interactive tutorials sessions. The purpose of the boot camps is to provide basic information for people interested in learning certain smart grid topics. We need to be aware not to compete with anything SGIP is working on and not to take away anything from their meetings.

Monday:

- SGIP 101
- Regulators Workshop – Chair: Robert Burke

Tuesday:

- Architecture 101 – Chair: Ron Ambrosio
- Interoperability 101 – Seeking chair for this boot camp. The purpose is the same as the GWAC Educational Outreach session. Chair will be able to build from Interoperability context Setting Framework and other existing GWAC materials.
- GridWise Architecture Council 101 – Chair: Dave Elve The purpose is to raise awareness of GWAC and their activities.

Plug-In Planning 2011

Erich Gunther

Erich Gunther shared that the Plug-In is a collaborative demonstration of interoperability. The objective is to demonstrate the significant amount of effort placed on standards and interoperability is now starting to bear fruit. The plan is to facilitate vendor discoveries of interoperability issues and opportunities in a live environment.

The Plug-In is different in many ways from a plug-fest, but especially because it's not a solely gathering of technical people discussing and working out interoperability on an ad-hoc basis. This is a much larger event co-located with one of the primary smart grid conferences, the home of the SGIP, and the conference of the DOE GridWise Architecture Council. A broad stakeholder community is attending this interactive event.

It is simultaneously a plug-fest, trade show, and a teaching/tech-transfer opportunity. This event will be used by the GWAC, NIST, DOE, and others to showcase how their efforts to promote and accelerate standards based interoperability is succeeding with the help of vendors who are participating.

Participating vendors:

- Silver Spring Networks
- Akuacom
- Quality Logic
- Tendril
- Cisco
- RuggedComm
- Sandia National labs
- EPRI

Erich Gunther shared the Plug-In floor plan and discussed the 3 interoperability zone concepts.

- New Zone
 - Focused on alpha/beta products
 - Foster discovery of issues and demonstrate what it takes to achieve interoperability with a “fresh” standard
 - OpenADR and OpenADE
- Evolving Zone
 - Focus on first generation but shipping products
 - Illustrate issues with testing and end-to-end interop
 - ZigBee SEP 1.1/2.0, IEC CIM
- Mature Zone
 - Focus on second or later generation products from major vendors that have multi-vendor field implementations
 - Illustrate the value of best of breed integration and how interoperability fosters competition
 - IEC 61850

Discussion continued on the 200-250k Plug-In budget, possible funding sources, and the possibility of an alternate plan if funding cannot be realized.

Lunch Speaker

Demonstration of the Grid Agents Platform for Smart Grid

Dave Cohen, Infotility

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GWAC Marketing

Dave Elve

Dave Elve submitted marketing ideas at the previous GWAC web meeting. The outcome of this discussion was an idea like SmartGridSuccess.org where we post positive messaging and deliver success stories to the public. An example of a similar site is the gridwisealliance.org where there are examples of positive messaging such as the tornado video. The target audience is the stakeholders, consumers, and commissioners.

Dave provided examples of people who are pushing back on the utilities and have no factual basis for their claims. The council reviewed the SmartGridSuccess.org pages and format. The idea behind this is that any utility can submit a case study that could bring in different faces from organizations to demonstrate interoperability.

GWAC Outreach Opportunities and Slide Deck

Erich Gunther

Erich focused on GWAC outreach, but more specifically the upcoming speaking opportunities for Council members. We want to look at our current outreach materials and discuss how to create empowerment with the collateral so the council members feel comfortable to actively participate in GWAC outreach.

Some ideas for outreach:

- A webinar on how do SGIP UCA and GWAC interact with each other. Perhaps a panel with a spokesperson from each organization.
- Vendor Community such as power system vendors, consumer product manufacturers, and controls companies.
- Consulting/System Integration Community
- Consumer groups such as Citizens Utility Board of Illinois, Amr and Ohio Citizens Board, and AARP and similar organizations.

The focus of GWAC is looking at interoperability and looking at issues dealing with a modernized power system. GWAC needs to remain unbiased about whether a power system adapts within the modern power grid or becomes like the dinosaur. We need to reach out to the end user and foster demand from the consumer side where they request smart grid products and technology.

Erich Gunther stressed that GWAC needs to get our house in order and engage with the regulatory community more effectively.

Discussion continued about transformation of industry – Is there an order of change – What could be or should be accepted.

National Association of Regulatory Commissioners (NARUC) Webinars

Erich Gunther

Erich Gunther said one of the tactical options mentioned as a GWAC outreach opportunity was creating NARUC Webinars. Erich Gunther has been talking with Robin Lunt to see what role GWAC can play to help reach regulators. Discussion continued on the various methods to disseminate GWAC message to regulators. Erich Gunther shared some comments he had received from Robin Lunt regarding the Council's role. One concern Robin has is webinar fatigue and the fact that interoperability is a hard topic to discuss. Ron Melton asked if one of the problems is that currently all the regulators receive is "geek speech". What Robin Lunt suggests is a "pithy" 1-2 page update on issues with webinar only when something is new or novel. What would be welcomed is webinar on SGIP CoS in context of GWAC recommendations to regulators on how to use them. This focused news would help them do their jobs. Ron Melton asked if they understand if interoperability is a good thing.

How can we put together a story to address this narrow element that regulators will understand and believe in? Erich Gunther will discuss this with Ward Camp off-line.

GridWeek Asia

Anto Budiardjo

The Indian Electrical and Electronics Manufacturers Association (IEEMA) organizes an event every two years in Mumbai. They claim it is the largest tradeshow. Now, they are interested in transitioning into smart grid electricity topics. They reached out to see if Clasma would be interested in holding an event in conjunction with IEEMA. The event is called GridWeek Asia and will be held at the Mumbai Grand Hyatt. Anto Budiardjo is expecting 500 participants.

GridWeek Asia will have 3 tracts:

- Power
- Infoteck
 - Cyber Security
 - Data and information
 - Communications

- Industry Transformation
 - Consumer transformation
 - Utility transformation
 - Industry transformation
 - Regulations

Anto Budiardjo provided additional background stating India is the second largest country in the world and India currently doesn't have enough power and uses mandatory demand response. It is expected that India will need to triple energy production by 2030. It is estimated that \$600 to \$900 billion in investment funds will be spent to accomplish the modernization of India's electrical grid.

The average bill is under \$10 per month. The target for a smart meter is \$30 including installation. The number one problem is that non-technical loss runs in the order of 35% – 40% (in the Green Revolution the agriculture community was given electricity for free. Also, politics and vote= electricity).

Data communications in India has to be based on GSM.

Anto would like to invite people from the United States to join him in India to understand the opportunities and to discuss the issues of smart grid. There is a strong appetite to learn about smart grid. Ron Melton asked if there were any Council members that would be interested in attending.

Ron Melton, Erich Gunther, and other GWAC members had a meeting with the Indian delegation at GridWeek who are members of power companies. The Indian's stressed a government to government connection meaning the desire for the channel of interaction to be government based. This could be somewhat of a distraction for GWAC to assist or attend GridWeek Asia.

Smart Grid Investment Grant for Smart Grid Interoperability

Ron Melton, PNNL, GWAC Administrator

Is there something the council can help develop for a quick plan or survey tool for accessing the Smart Grid Investment Grant FOA36.

Ron Melton discussed the example used to access the Pacific Northwest Smart Grid Demonstration Project.

Discussion continued

- What are the next steps:
- Who would like to participate

Outreach & Liaison Updates

Ron Melton, PNNL, GWAC Administrator

- Ron Ambrosio – GridWise Alliance
 - GridWise Alliance has elected a new president.
 - Value proposition paper and study:
 - Quantum is conducting the study.
 - Study is based on existing information and interviews.
 - Currently a draft is under review within the alliance.
- Ron Ambrosio - ISO/IEC JTC1
 - Ron Ambrosio will be attending the plenary meeting in San Diego the 1st week in November.
 - Going over a standards white paper that will:
 - Conduct a survey as to what current activities are related and relevant to the smart grid.
 - Recommendations for future efforts
- Ken Wacks - ISO/IEC JTC1 Sub Committee 25 Working Group 1
 - All three documents are moving nearer to final approval.
 - Gateway standard
 - Energy Management standard
 - Product Interoperability standard
 - Meeting scheduled for next week in Australia.
- Erich Gunther – EPRI IntelliGrid
 - Roadmap activities continue with smart grid roadmap. Calif ISO. White paper describes a methodical process to adopt a new standard focusing on 12 key areas. There will be a slide deck for this whitepaper. The paper is designed to educate a broad range of audiences.
 - The EPRI demo project work continues.
 - Erich Gunther will invite Matt Wakefield from EPRI to provide us a presentation of the EPRI demo project at an upcoming GWAC F2F meeting.
- Erich Gunther - UCAlug
 - Priority action plan activities continue
 - Focus is gearing up for supporting the Grid-Interop Plug-In activities.
 - Working to be first to apply SGIP testing guidelines.
 - OpenSG meeting week of November 13th, 2011.
- Gerald Fitzpatrick – NIST

- Federal Register notice for version 2 of the interoperability framework should be published soon.
 - NIST has requested resolutions be provided along with the comments.
 - NIST will resolve what comments they can and consult SGIP for the others.
 - The target release date was by Grid-Interop however delays are making this date impractical.
- EU architecture effort is underway. NIST and SGIP have Smart Grid liaisons in this group.
- Their conceptual model should be completed soon DER (as compared to GWAC's model).
- Functional architecture should be completed by the end of this year. They have invited SGIP and NIST to be there at the plenary session in June 2012.
- Dave Wollman attended US standards roundtable in Germany.
- George Arnold was in China recently.
 - China is coming on strong proposing standards within ISO/IEC
 - Ambassador Locke stressed corporation.
 - GE's Immelt stated that China will drive the standard.
 - A new committee on demand response was proposed.
 - Review potential overlap with TC57.
 - Steve Bushbee and Dave Holmberg are involved.
 - Approved unilaterally at political levels within IEC.
 - This is a project committee with a finite life.
 - This is supposedly work the Chinese have already done that they want to make into a standard
- Tracy Markie - ASHRAE Conference
 - Working on materials for the AHR show which is a trade show for ASHRAE that takes place mid-January. This year he is focusing on interoperability as it pertains to buildings.
 - Working on buildings industries standards and protocols focusing on bringing together the relationships. For example, how are we going to talk with meters and what to do with the information provided?
- Klaus Bender - UTC
 - Still looking at spectrum for smart grid and data
 - Recent waiver request in Michigan that took some utilities regarding public safety.
 - Looking at department of commerce for bandwidth dedicated for smart grid use that could be shared with the government.
 - Looking at reallocation from public to private sector
 - Reviewing current proposed cyber security legislation
- Rik Drummond is speaking at the 10th Annual quality Assurance meeting in Spain next week.

Action Items Review

Adjourn

Robert Burke motioned to adjourn the meeting, Rik Drummond seconded the motion. The meeting adjourned at 4:44 p.m.