

Meeting Minutes June 13, 2012

Members

Ron Ambrosio, IBM T.J. Watson Research Center
Robert Burke, ISO New England
Rik Drummond, Drummond Group
Tony Giroti
Erich Gunther, EnerNex Corporation
Mark Knight, Logica
Tracy Markie, Engenuity
Bob Saint, NRECA
Ken Wacks, consultant to Sensus Metering Systems Inc.

Support – Pacific Northwest National Laboratory (PNNL)

Ron Melton, PNNL & GWAC Administrator
Sherry Kowalski, PNNL

Speakers and Guests

Naieem Ashem, KEMA
Anto Budiardjo, Clasma Events, Inc.
James Mater, Quality Logic
Leonard Tillman, Balch & Bingham LLP
Gordon Matthews, BPA
Ryan Bird, Bridge Energy Group, Inc.
Tim Schoechele

Members – not present

Ward Camp, Landis + Gyr
Paul De Martini, Newport Consulting Group, LLC
Alex Levinson, Lockheed Martin
Tom Sloan, Kansas State Legislator

Members Emeritus

Joe Bucciero, EnerNex Corporation
Dave Hardin, EnerNOC, Inc.

Proprietary Information Notice

Erich Gunther read the proprietary information disclosure policy according to the bylaws to the members and guests.

Welcome and Administrative Business

Ron Melton, GWAC Administrator

Erich Gunther called the meeting to order at 10:06 a.m.

The minutes from the April F2F meeting in Knoxville were distributed to the council via email. Mark Knight submitted corrections. Robert Burke motioned to accept the minutes with the recommended changes, Bob Saint seconded the motion, and the minutes were approved.

Meeting minutes from the May 16 web meeting were distributed to council via email. Corrections were received from Mark Knight and Ken Wacks. Robert motioned to accept the minutes with the recommended changes, Bob Saint seconded the motion, and the minutes were approved.

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

- **August 28-29, 2012:** GWAC Face-to-Face Meeting, Seattle, WA
- **September 19, 2012:** GWAC Web Meeting
- **October 2-4, 2012:** GridWeek, Washington, DC
- **October 31- November 1, 2012:** GWAC Face-to-face Meeting, Irving, TX
- **November 14, 2012:** GWAC Web Meeting
- **December 3-6, 2012:** Grid-Interop, Irving, TX

Erich Gunther stressed the importance of council member participation in GWAC meetings and calls. Robert Burke requested a reminder to be sent out a few days prior to the meeting. Sherry Kowalski will schedule reminders to be distributed prior to GWAC meetings.

Ron Melton discussed the budget restraints and the challenges that effect GWAC currently and into next fiscal year due to the way the Department of Energy is managing the Office of Energy Smart Grid Research and Development budget. As a result, GWAC travel reimbursement will not be offered for GridWeek. GWAC will be focusing on the face-to-face council meetings and Grid-Interop forum. If the budget situation eases, we can revisit the travel reimbursement for other activities.

Seattle Face-to-Face meeting & Workshop Planning and Guest Speakers

Erich Gunther, GWAC Chairman

- The August 28-29 face-to-face meeting and workshop will be held at the Battelle offices in Seattle. The afternoon of the first day and the morning of the second day will consist of a technical workshop.
- A room block has been reserved at the Courtyard Marriott, downtown Seattle. Sherry Kowalski will distribute a logistical email towards the end of June.
- The workshop committee that consists of Ron Melton, Ron Ambrosio, Ken Wacks, and Erich Gunther met on June 4 and discussed the theme and possible speakers. The possible theme is the Integrating Distributed Energy Resources with the focus on the local level verses State and Federal or Local Community Drive. Ken Wacks also recommended that we settle on a theme of the workshop; discussion continued and it was settled that “Local Community Drive” would be a suitable theme. The restated theme is that Colwood is a working example of local municipalities taking their own independent action to bring new resources into their system at the distribution level to varying degrees of impact. Colwood is moving strongly to be a net zero community.

Ken Wacks reported that he is hoping to have participation from a city councilwoman from the city of Colwood, British Columbia and a representative from Canada’s T’suke First Nation’s tribe. Due to funding challenges, attendance in person may be difficult and they will check with the Royal Roads University regarding video and teleconferencing capabilities. Ken recommended that we utilize the videos that they created of their solar insulation to kick-off the workshop.

Ron Melton suggested that there might be some activities with the faculty members of University of Washington that GWAC would like to invite and contribute to the workshop, or others around the country that we would want to encourage attending to discuss this particular focus. Ken Wacks will also contact MIT to see if there is any interest.

Gordon Matthews was asked to discuss with Terry Oliver and others at BPA what sort of active involvement and discussion that BPA might want to have in this workshop.

Irving, TX Face-to-Face Meeting & Workshop Planning

Ron Melton, GWAC Administrator

- The last quarter F2F meeting is set for 10/31 – 11/1. The meeting is following the Grid-Interop Planning meeting as agreed upon at the last face-to-face meeting in Knoxville, Tennessee. Details still to be determined.
- Rik Drummond has secured Donny Helm from ONCOR as a speaker at the Irving meeting.

Review of Action Items

Ron Melton, GWAC Administrator

Ron Melton reviewed the outstanding action items with the council:

- Council to review updated SGIP 2.0 plan to prepare for discussion at the June 13, 2012 GWAC web meeting.
- Ron Melton and Erich Gunther to finalize the EAC presentation and circulate to the council for comments and final review.
- Ron Ambrosio to create and provide a summary of SGIP Architecture Committee planned activities to Ron Melton in preparation for the DOE Electricity Advisory Committee meeting. Action due within 3 days.
- Erich Gunther and Ron Melton to explore possible leave behinds for the DOE Electricity Advisory Committee meeting.
- Ron Ambrosio suggested the council review the website products for current relevance.
- Committee formed to formalize and execute an agreed upon plan to make GWAC's "Interoperability Context Setting Framework" an IEEE / ISO / IEC document. Committee consists of Erich Gunther, Doug Houseman, Steve Widergren, Ron Ambrosio, and Ken Wacks. An invitation to join the committee will be sent out to Roger Fujii. Ron Melton and Doug Housman to co-chair the new committee. Committee to meet twice prior to the September 19 GWAC web meeting. The first meeting will be scheduled after July 1, 2012 due to schedules.
- Ken Wacks to approach and invite Canada's T'suke First Nation and Solar Colwood to present at the August face-to-face meeting in Seattle.

- Meeting Workshop Committee was formed to plan and execute a workshop at the August 28-29 meeting. Members consist of Erich Gunther, Ron Ambrosio, and Ken Wacks. Ken Wacks and Ron Ambrosio will co-chair.
- GWAC sub-committees (Metrics and Planning) to meet and present at June web meeting.
- Ron Melton and Erich Gunther to continue GWAC budget discussions.
- GWAC to offer to present at NARUC meeting or webinar.
- Ron Melton to draft “Associates Membership” by-law change to present to council by 06/18/12.
- Erich Gunther to have Decision Makers Check List applied to the GreenButton Initiative.
- Tom Sloan to investigate possible outreach opportunities for renewable energy presentations and discussions with National Association of State Utility Consumer Advocates (NASUCA).

ConnectivityWeek Recap

Ron Melton, GWAC Administrator

Ken Wacks reported that ConnectivityWeek was a productive meeting, but there was just too much to do because of all of the corresponding meetings on Monday. Ron Ambrosio reported the attendance was significantly down from previous years. Erich Gunther reported the GWAC GridWise Expo session was lightly attended the first day, but the attendance picked up later in the conference. Although the sessions were lightly attended, they were all quality sessions. Anto Budiardjo noted that Clasma is working to get local engagement from the IT community.

Grid-Interop 2012 Planning Update

Ron Melton, GWAC Administrator

Anto Budiardjo reported that a one-day face-to-face planning meeting was held on June 6, 2012 at Tendril Headquarters in Denver, CO. The meeting was focused on addressing the development of the fundamental sessions, workshops, boot camps, agenda, and the plug-in. Discussion continued about making the meeting compelling to increase the attendance. Anto Budiardjo stated that the smart grid community has a level of fear, uncertainty and doubt (FUD) when it comes to the future of the smart grid. Ron Melton discussed some of the positive energy he has received from the utilities when discussing some of the exciting things that they are doing. Perhaps GWAC can capture some of that energy and invite the utilities to come and discuss their projects at Grid-Interop. Discussion continued regarding risk aversion and the FUD concept.

New activities might include:

- Smart Grid Interoperability Family Feud Game (Tuesday evening after a short reception)
- Smart Grid Executives Forum (Dinner, golf, SGIP meeting, short executive forum)
- Standards Development Organization Forum
 - Closing of Grid-Interop
 - George Arnold will be inviting members to forum

Ron Ambrosio suggested that GridInterop might be good timing for a subsequent follow-up on face-to-face session from the international activities and discussions of the TC57 working group 19 and both the SGAC and Reference Architecture group Europe meetings.

Ron Melton stated that we will need to plan a significant amount of time at the August face-to-face meeting working on the Grid-Interop foundation sessions.

The call for papers went out and the Clasma Grid-Interop 2012 website has been launched. Abstracts for the tracks were due June 16, but the date was extended to July 16, 2012.

Plug-In 2012 Planning Update

Erich Gunther, GWAC Chairman

Anto Budiardjo reported that the planning committee discussed the difficulties with last year's Plug-In. The technical alliances were not contributing to the event so what the committee is proposing, is to make the plug-in centered on an alliances such as open Automation Demand Response (ADR) that would like to put together an open end-to-end activity. The individual alliances could participate and achieve results of an end-to-end flow or demonstration. Discussion continued about how the individual alliances may not necessarily promote interoperability principles, and how we could promote and engage them to achieve a positive result for the Plug-in.

James Mater said the QualityLogic will be submitting a paper with Garry McNaughton and MultiSpeak on mappings they are doing between MultiSpeak, SEP2 and Open ADR. This illustrates an interest in interoperability among the alliances, and therefore they might be interested in this opportunity.

Discussion continued on ways to engage alliances to work together and demonstrate interoperability at the Plug-In and the timing of this topic this year. Dave Hardin mentioned that we may be a year premature to target this Plug-In topic.

Ron Melton suggested Grid-Interop have a session that challenges the alliances to make a presentation on how they address interoperability. Perhaps a structure motivated by the GWAC Stack and other GWAC documents about the principles of interoperability. Basically challenge them to come and address a case on how the alliance addresses interoperability challenges in a positive way. James Mater recommended that we simplify the session to be solely on demonstrating interoperability between standards. Ron Melton also suggested that it would be interesting to put the challenge in context of the Smart Grid Interoperability Maturity Model, using the alliances as a community of participants.

Metrics and Values

Erich Gunther, GWAC Chairman

At the Knoxville meeting, GWAC discussed the need to capture metrics and values and hone in on the GWAC's important works.

The Metrics and Values committee meet in June and created a graph view of the context of technology adoption life cycle. Ron Melton shared the slide with the graphical representation of the relationship of the council's work and life-cycle of technology within the industry. The diagram is in "tower" form with the GWAC constitution being the base and building the tower with other GWAC products. This is a new view created by Paul DeMartini that the council needs to review and provide comment and feedback. Erich Gunther used this graph at the presentation at the Department of Energy Electricity Advisory committee meeting on June 12. Erich Gunther enhanced the slide by illustrating the GWAC impact by metrics and the H-Index.

Department of Energy Electricity Advisory Committee (EAC)

Meeting Recap

Erich Gunther GWAC Chairman

Erich Gunther provided a thirty-five minute presentation and then allowed a twenty-five minute question and answer period. Erich Gunther addressed some questions about GWAC's independence and the availability of GWAC products and documents. In general, most of the comments and feedback received after the presentation was related to GWAC outreach and helping the regulatory community, and suggested that GWAC concentrate in that area. Paul Centolella is a new member on the EAC and he, as well as others, asked several leading questions about GWAC and the value of GWAC. In closing, Erich Gunther asked specifically that EAC recommend to DOE continue the funding of the administrator to allow us to continue GWAC's good works.

DOE OE Smart Grid R&D Peer Review

Ron Melton, GWAC Administrator

Ron Melton participated in a workshop on June 6, 2012 that focused on the Research and Development roadmap that Dan Ton is now responsible for. Much of the discussion was focused on modeling and simulation. In that discussion, interoperability in modeling was identified by several people as a key problem. There is a need to be able to move and share results from model to model. The CIM and IEEE 61850 were discussed as examples of standards that might help with standardizing modeling for the associated integration problem. Ron Melton recommended that we think of incorporating some of these issues and recommendations in future GWAC materials.

Some of the questions from the reviewers posed were:

- Is GWAC really independent?

- 10 of 13 GWAC members are from vendors – is this the correct balance?
- Who is making the Decision Maker’s Checklist and how is it made?
- Are there any plans to update the Checklist and Benefits papers?
- What challenges does GWAC encounter in engaging regulatory community?
- Where does GWAC get the inputs from its work?

SGIP 2.0 Comments

Ron Melton, GWAC Administrator & Erich Gunther, GWAC Chairman

The Smart Grid Interoperability Panel 2.0 version 2 has been posted and is on the NIST site for review. The Council’s next step is to review the updated version and decide if there are, if any, comments that the council members would like to submit. The council reviewed the update to see how the comments GWAC submitted were addressed. Below is a summary of the review:

Comment: Interoperability

The plan should focus more specifically and explicitly on interoperability and interoperability standards. The primary goal of SGIP should enable a seamless smart grid using a combination of existing and new equipment while supporting additional applications. Among these applications are the integration of distributed energy resources, microgrids, storage, and electric vehicles. In the “Position Statement and Value Proposition”, for example, many of the sections go well beyond the problems associated with identifying the requirements for interoperability standards to support smart grid implementation.

Perceived Resolution:

Page 4, Lines 3-5

The third, and final, phase of the NIST plan was to develop a plan for testing and certification to ensure that Smart Grid equipment and systems conform to standards for security and **interoperability**.

Page 10, Lines 40-42

The mission of the SGIP is to provide a strong framework for coordination of all stakeholders of the Smart Grid to accelerate standards harmonization and development and advance the **interoperability** of Smart Grid devices and systems.

Page 11, Lines 15-16

(4) To proactively inform and educate smart grid industry stakeholders on the definition of and the benefits attributable to **interoperability**

Comment: Fee Structure

The proposed fee structure needs to include an analysis of the revenue streams and should include a discussion of the balance between supporting SGIP operations via fees and others sources including US Government funding. Operating scenarios under various funding levels should be outlined now, rather than scrambling to adjust to actual revenues. One particular observation on the proposed fee amounts – the proposed fees for university participation are probably so high as to all but eliminate participation by the academic community in the SGIP. Many of the SGIP committees are staffed by consultants who provide considerable pro-bono

services. They should be encouraged to continue supporting SGIP. This situation is not achieved by requiring a higher fee category for the privilege of donating services.

The nature of SGIP meetings and other activities relative to participation by non-members should be clearly stated. In order to continue to obtain input from all interested parties, the meetings and activities should remain open to the public. All meetings should be available by web or conference call. There should be no fee to attend via teleconference.

The work products of the SGIP should be public especially since considerable ratepayer and public funds will continue to support SGIP.

Perceived Resolution:

Page 23, Lines 6-11

There is currently a “Tiger Team” looking at the issue of how to implement “balanced voting” which is intended to help ensure decisions are reached with support from a broad and balanced set of the voting members for each decision. The BSPWG believes once this Tiger Team report is presented, and if or when approved by the existing Governing Board, the report should be assessed for use in SGIP 2.0.

Page 24, Lines 32-46 & Page 25, Lines 1-11

(4) Technical Champions:

- (a) in SGIP 1.0, NIST has provided, either directly with its own staff or through its Program Administrator, numerous Technical Champions at any single point in time to accelerate SGIP activities. These individuals together with other experts who volunteered their time provided the following levels of support to SGIP activities:

Work products comments on pages 15 & 26

Page 34, Lines 27-30 - Recommended by the BSPWG:

Document Access fees –many industry and professional organizations require additional fees to obtain access to various work products and/or documents. Because SGIP 1.0 was Federally funded, SGIP 1.0 provides free public access to all of the work product and documentation.

Comment: GWAC Relationship

The GridWise® Architecture Council (GWAC) is a group of 13 independent domain experts representing the diverse set of communities with an interest in modernization of the nation’s electric power system. The candidates are reviewed by the U.S. Department of Energy for potential contribution to strategic smart grid issues. GWAC is an independent organization. The U.S. Department of Energy through Pacific Northwest National Laboratory provides administrative support to the GWAC members and members emeritus. The work of the council has been focused on the problem of facilitating effective approaches to the application of modern information technology in creating a more reliable, efficient and secure electric power system – a so called smart grid. The early work of the council is documented in the “Interoperability Context Setting Framework” which is the source of the often cited “GWAC Stack.” The council continues its forward-looking, strategic efforts to address the challenges of creating a modern, information-based electric power system.

In recognition of the leadership activities of the GWAC, the council is specifically identified in EISA

2007 as an entity with which NIST should coordinate in the execution of their responsibilities to develop smart grid related interoperability standards. As mentioned in the SGIP 2.0 introductory material, NIST came to the GWAC at the beginning of their efforts, which led to the creation of the SGIP. The ongoing role of the GWAC in the SGIP, though informal, has included SGIP co-leadership of the majority of the DEWGs. Also, GWAC current and emeritus members serve in a variety of leadership positions including several governing board seats and chairmanships of the SGAC and the SGTCC.

Given the relationship between NIST and the GWAC as stated in EISA 2007, the GWAC proposes that the SGIP 2.0 plan should include explicit formulation of a relationship between SGIP 2.0 and the GWAC. This relationship must promote the spirit of the EISA 2007 and the SGIP 2.0 stated objective of continuing to support NIST in their assigned responsibilities. There are several ways this relationship can be achieved, including, but not limited to:

- Recognizing the GWAC in the same manner as the NIST Smart Grid Advisory Committee
- Ex Officio membership by GWAC on the SGIP Technical Committee
- Ex Officio membership by GWAC on the SGIP Board of Directors
- Requirements for an annual joint meeting between the SGIP 2.0 Executive Committee (or one of the other committees such as the Technical Committee) and the GWAC.

There are, no doubt, other possible ways to define a formal relationship between the GWAC and SGIP 2.0 organization and their activities.

Perceived Resolution: None perceived

Ron Melton requested that the council members review the SGIP revision and submit their comments to Erich Gunther by June 18, 2012.

GWAC Stack as a “Standard”

Erich Gunther GWAC Chairman

A committee consisting of Erich Gunther, Ron Melton, Doug Housman, Steve Widergren, Ron Ambrosio and Ken Wacks has been formed to steer this action. The Committee has not met, but a meeting is planned the first part of July. The opportunity to vote on this as an IEEE Computer Society standard will be at the end of July.

Transactive Energy Workshop Follow-up Update

Ron Melton, GWAC Administrator

Mark Knight and Ron Melton are working together to finalize the work that will come out of the 2011 Transactive Energy Workshop. The TEW 2012 proceedings are in the final stages.

Action Items Review

Ron Melton, GWAC Administrator

- SGIP 2.0, V2 inputs due to Erich Gunther by Monday morning, June 18th.
- All GWAC members check your personal calendars and make sure you clear conflicts with future GWAC meetings.
- Schedule GWAC as a “standard” committee meeting.
- Sherry Kowalski to submit correct hotel registration information to council for the August meeting.

Adjourn

Robert Burke motioned to adjourn the meeting, Ron Ambrosio seconded the motion. Erich Gunther adjourned the meeting at 11:28 a.m.