

Meeting Minutes September 19, 2012

Members

Ron Ambrosio, IBM T.J. Watson Research Center
Robert Burke, ISO New England
Mark Knight, CGI
Tracy Markie, Engenuity
Bob Saint, NRECA
Ken Wacks, consultant to Sensus Metering Systems Inc.
Tom Sloan, Kansas State Legislator
Alex Levinson, Lockheed Martin

Associates

James Mater, Quality Logic

Support – Pacific Northwest National Laboratory (PNNL)

Ron Melton, PNNL & GWAC Administrator
Sherry Kowalski, PNNL
Todd Haler, PNNL
Steve Widergren, PNNL

Speakers and Guests

George Arnold, NIST
Tim Schoechle
Chris Irwin, Department of Energy

Members Emeritus

Dave Hardin, EnerNOC, Inc.

Members – not present

Erich Gunther, EnerNex Corporation
Ward Camp, Landis + Gyr
Paul De Martini, Newport Consulting
Tony Giroti
Rik Drummond, Drummond Group

Proprietary Information Notice

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

Welcome and Administrative Business

Ron Melton, GWAC Administrator

Ron Melton called the meeting to order at 10:09 am.

Meeting minutes from the August face-to-face meeting will be distributed and reviewed at the October face-to-face meeting.

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

- **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
- **January 19, 2013:** GWAC Web Meeting
- **February 5-6, 2013:** GWAC Face-to-Face Meeting, GE Smart Grid Lab, Atlanta, GA
- **March 20, 2013:** GWAC Web Meeting
- **April 24, 2013:** GWAC Web Meeting
- **May 21-22, 2013:** GWAC Face-to-Face Meeting, Portland, OR

James Mater will assist with host and logistical GWAC face-to-face May meeting arrangements by approaching Portland General Electric to see if they would be willing to host the venue. Smart Grid Oregon is planning in a transactive energy conference and would like GWAC to be a sponsor. James will attempt to plan the conference before or slightly overlapping the GWAC meeting. James will get the dates on people's calendars and see if there is enough interest to continue the planning.

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

Ron Melton, GWAC Administrator

The next face-to-face meeting is set for 10/31 – 11/1. The meeting is following the Grid-Interop Planning meeting as agreed upon at the face-to-face meeting in Irving, TX. Details and hotel logistics still being worked out and will be distributed soon.

Originally the plan was to have the theme of the workshop on the Interoperability Maturity Model but due to budget constraints it was determined that the workshop wouldn't enable sufficient progress. A new idea for the workshop theme will be "Smart Grid Architectures"; this is consistent with the guidance indirectly received from Department of Energy. The sub-theme could be "smart grid architecture related to transactive energy." The workshop would be used to evaluate the activity or to dive directly in to the activity.

James Mater suggested the council invite Ed Cazalet and focus an afternoon or morning session on the transactive energy roadmap work that Ed is currently facilitating.

Ron Melton suggested a briefing from Ron Ambrosio and Doug Houseman of the SGIP Architecture committee's recent work. The workshop can focus on a range of architectural things discussed with the purpose of honing in on specifics as the thread for the rest of the year.

At the international standards meeting, International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) last week in Switzerland, there was consensus to move forward with the next generation of energy management standards. The plan is to embark on a two-year project to upgrade the standard. Among the topics that are not included in the standard now is transactive energy. They just published the International Standard last July. Ken Wacks suggested evaluating a question such as "What elements of transactive energy are appropriate to include in an international standard?"

Steve Widergren shared that PNNL hosted a face-to-face meeting with Working Group 19 of the International Electrotechnical Commission, Technical Committee (IEC TC 57), SGIP members and

the Smart Grid SGCE, which is the European smart grid group that is coordinating standards for the smart grid in Europe. Steve suggested a briefing of the meeting.

Ron Ambrosio agreed with Steve Widergren's suggestion and that the update should be part of a SGCE update because it was the Smart Grid Coordination Group (SGCG) that was coordinating with the IEC TC 57, Working Group 19 (WG19) activities. Ron Ambrosio offered to coordinate with the EU and IEC TC 57 WG 19 and identify possible workshop speakers and participants. The working groups recently published in Joint Technical Committee 1, Subcommittee 25, Working Group 1 (JTC 1 SC 25 WG 1), and submitted a new work item proposal to create an ISO/IEC 18012 application model for that energy management standard.

Ken Wacks will make the new standards available to GWAC members once we have made a commitment to work with the information.

George Arnold has noticed some divergence with what we are doing in the US with smart grid architecture and what is happening in Europe, Korea, Japan and China. It's clearly an important and complicated topic and he likes the idea of us focusing specifically on transactive energy. Ron Melton would like to include NIST among the workshop participants.

Review of Action Items

Ron Melton, GWAC Administrator

- Evaluate potential co-sponsors for future face-to-face meetings
 - February meeting – Erich Gunther to contact GE
 - May – Terry Oliver and James Mater to assist with securing a location
- Blue Ocean Group task
 - "Blue Ocean" committee (Tom Sloan, Paul De Martini, Terry Oliver and Todd Halter) will draft a 4 to 5 page white paper on the "Blue Ocean" topic discussed at the GWAC face-to-face in Seattle. Todd Halter reported that they are in process of arranging a first meeting. Todd has typed up the notes and will get a skeleton of the paper out to the Council this week.
- Create proceedings and results from August workshop
 - Proceedings draft created and will be distributed to council for review and discussion at October's face-to-face meeting. The proceedings are approximately 80% complete and Ron will work on the summary.
- GWAC as a "standard" item
 - 9/10/12 Ron Melton submitted a request to Doug Houseman, as the Secretary of the IEEE PES Technical Committee for PES related standards, to recognize and publish the GWAC stack as a standard. Work is progressing and is on track.
- Benefits paper presentation task
 - Erich Gunther to email Todd Halter a copy of the Benefits Paper slide deck
- Liaison letter from GWAC to ISO/IEC JTC1/SC25/WG1
 - 9/7/12 Erich Gunther created and distributed liaison letter.

Grid-Interop 2012 Planning Update

Ron Melton, GWAC Administrator

Todd Halter reported that Grid-Interop planning is on schedule. With the exception of a few speakers, the GWAC tracks and sessions have been developed and speakers confirmed. Approximately 54 abstracts have been submitted, which is down from the 80 abstracts we had in 2011. Work is continuing with securing the remaining speakers.

Also, the Grid-Interop committee is working with Smart Grid Interoperability Panel (SGIP) to allow them additional time for SGIP at the event so they can do transition-like activities between the current SGIP and SGIP 2.0. There are also plans to do memorandum of understanding (MOU) signing between NIST and SGIP 2.0.

Plug-In 2012 Planning Update

Erich Gunther, GWAC Chairman

Todd Halter reported the focus is still to target alliances for Plug-In participants. The Plug-In committee is looking to get a larger level of commitment with several alliances within the next few weeks.

GWAC Stack as a “Standard”

Ron Melton, GWAC Administrator, Erich Gunther, GWAC Chairman and Doug Houseman

Doug Housman and Ron Melton are the leaders of this task and they have made some progress.

On 9/10/12, Ron Melton submitted a request to Doug Houseman, as the Secretary of the IEEE PES Technical Committee for PES related standards, to recognize and publish the GWAC stack as a technical report. This will put the task on a fast track using IEEE Industry Connections Process, and then work the ISO/IEC aspect. Additionally, GWAC has submitted the liaison letter to the ISO/IEC Technical Committee.

Steve Widergren has continued to promote discussion with the IEEE Computer Society.

The approach that is in play is to fast track this IEEE recognition using the IEEE industries connection process, and then address any ISO/IEC aspects once this is completed. This approach has been explained to the IEEE Computer Society, which supports this action and agrees that this is a good approach.

It is estimated that in January, we might expect the Interoperability Context Setting Framework branded as an IEEE technical report document. Ken Wacks asked when we should start the international process. US Technical Advisory Group meeting is scheduled with international experts in late April, and if GWAC wants to put this forward internationally, the way to do this is through the US Technical Advisory Group that meets every 2 months prior to the April meeting. Ken Wacks offered to carry this as a proposed technical report that is offered by the US. Discussion continued about editing. GWAC learned that you are unable to co-brand a technical report but you can co-brand a standard.

Given the work that the Europeans have done by creating a variance of the GWAC stack, which is what was discussed at the face-to-face meeting this week at PNNL, the next step relative to the international community would be to have joint architecture work between SGAC and EU RAWG to evolve to a common international representation. The GWAC Stack will be embedded in the harmonized model and also recognizes the work the Europeans have done. The model can then be brought into IEC. Ron Ambrosio believes IEEE technical report status is important for the existing body of work from the GridWise Architecture Council.

The joint coordination has started with the working sessions of the SGAC, RAWG, IEC TC 57 Working Group 19. The path is already being trod so the question is what practical ways can the GridWise Architecture Council be a part of that work. What would the role be with the GWAC relative to the other participants in the activity?

Ron Melton mentioned that one of the ways the DOE Smart Grid R&D program is moving is to have more emphasis on micro grids. One of the possible areas of activities that the Council could become involved in as a result of this emphasis is looking at the interoperability and architectural aspects of integrating microgrids with the full grid; also, perhaps work on the architecture within the context of a microgrid.

In summary, GWAC is pursuing the technical report aspect of the IEEE as a way to get the Interoperability Context Setting Framework out to the broader audience. The council also had a good discussion and interesting ideas about what the possibilities might be for the evolution of work in conjunction with NIST, SGAC, and the Europeans.

Transactive Energy Workshop Follow-up Update

Ron Melton, GWAC Administrator

The transactive energy workshop activity continues with weekly meetings. Progress has been made overall, but there is still a need to establish a common ground. There is still not a clear basis for the common ground versus distinct differences between the approaches. The group has identified a focus for sorting these differences out by looking at the relationship between transactive approaches and balancing of the power system (and balancing authorities) as the key to sorting out differences.

Smart Grid Interoperability Panel (SGIP) Update

George Arnold, NIST & Steve Widergren, PNNL

SGIP 2.0

George Arnold shared that there is a lot of energy behind the business and sustainability plan and things are progressing well. The SGIP Governing Board has been invited to be the new Board of Directors for SGIP 2.0 and they have been holding bi-weekly meetings. There are a number of other board committees that have been established such as a technical committee, marketing and membership committee, executive committee, and audit committee. Nomination and governance committees have been meeting to develop the next layer of detail.

The solicitation for paid memberships will be starting soon and a membership package consisting an application and bylaws will be distributed in October, and the members that sign-up in 2012 will have the “founding member” recognition.

There is a small staff matter that has been assigned. National Electrical Manufacturers Association (NEMA) has made Paul Molitor available as a full time Implementation Manager. Greg Obenchain has been made available half-time by Edison Electric Institute (EEI) and Don Van Nolan half-time by Electric Power Research Institute (EPRI). There have also been a number of Board members that have taken an active role to move the plan forward.

NIST would like to have a memorandum of understanding (MOU) with SGIP 2.0 and a signing event with Pat Gallagher, memorializing the relationship and level of support that the National Institute of Standards and Technology (NIST) will provide to SGIP, planned for Grid-Interop 2012.

The Business and Sustainability group developed a document that was accepted by the Governing Board in June that is the blueprint for moving forward. One part of the plan is a financial model has been drafted as a tool to insure the organization’s success.

Other News

There is going to be a new Priority Action Plan (PAP) for a Gas Infrastructure Working Group starting to take shape, and they are developing membership. The outreach did make progress in August and September to get other gas and electric/gas utilities involved in this new group.

GWAC Follow-up Planning

Ron Melton, GWAC Administrator

As was mentioned in the August GWAC meeting, there are no DOE funds provided for FY13 and GWAC will be operating on carryover. Budget is sufficient to continue to hold GWAC meetings, and to support planning for Grid-Interop 2013. There is not sufficient budget to do anything beyond that.

Per PNNL’s request to the DOE, GWAC is requesting additional FY13 funds. If these funds should become available, GWAC would focus on architecture and to support involvement in developing smart grid architecture and interoperability guidelines for transactive energy micro-grid and the relationships to the broader grid. GWAC would be notified mid-year if the request for additional funding is approved.

Steve Widergren shared that the Smart Grid Interoperability Maturity Model team is looking for opportunities for outreach and advancing the SG IMM’s work. One development in the IMM is a paper for the ISGT meeting in February, 2013. The abstract has been accepted and a draft created for circulation among the SG IMM team for their review, comments and refinements.

The SG IMM team is also looking at coordinating work with SEI, which has been doing work for Department of Energy, Homeland Security, as well as other groups on a cyber-security maturity model (ESC2MC).

Chris Irwin reiterated that it is a grueling budget season and the Department of Energy does not have a guaranteed path to funding in FY13. Look for opportunities to arise on the transactive

energy conceptual foundation that might attract funding with but also from other government-partnered sources. Ron Melton suggested that they get together for off-line transactive energy prospect discussions.

Action Items Review

Ron Melton, GWAC Administrator

- Ron Melton and Chris Irwin to have an offline transactive energy prospecting discussion.
- Ron Melton to develop GWAC workshop agenda for a workshop based on the topics discussed on this call.
- Ron Melton and Sherry Kowalski to develop GWAC workshop publicity.
- James Mater will assist with host and logistical GWAC face-to-face May meeting arrangements by approaching Portland General Electric to see if they would be willing to host the venue.

Adjourn

Tracy Markie motioned to adjourn the meeting, Ron Ambrosio seconded the motion. Meeting adjourned at 11:55 am.