

Meeting Minutes

Sept. 20, 2017

GWAC Members

David Forfia, Director, Enterprise Architecture & IT Transformation, Electric Reliability Council of Texas (ERCOT)

Ron Bernstein, President, RBCG, LLC

Gerald R. Gray, Technical Executive at the Electric Power Research Institute (EPRI)

Lorenzo Kristov, Principal, Market & Infrastructure Policy, California Independent System Operator

James Mater, Co-Founder and Director, QualityLogic, Inc.

Heather Sanders, California Public Utilities

GWAC Associates & Emeritus

Gordon Matthews, Technology Innovation, Bonneville Power Administration

Chris Villarreal, President, Plugged In Strategies

Ken Wacks, Home, Building and Utility Systems

Members Not Present

Ron Ambrosio, Chief Scientist, Utopus Insights, Inc.

Tanya Barham, Director of Operations, PECl

Doug Houseman, Grid Modernization Lead, Burns & McDonnell

Stephen Knapp, Executive Director at Power Analytics Corporation

Paul De Martini, Managing Director, Newport Consulting Group, LLC

Farrokh Rahimi, Senior Vice President, Open Access Technology International, Inc. (OATI)

Tom, Sloan, State Representative, State of Kansas

Guests

Phil Davis

David Katz

David LeVee

Larry Lackey

Aaron Snyder

PNNL Support

Ron Melton, GWAC Administrator

Mark Knight, GWAC Support

Susie McGuire, GWAC Coordinator

Meeting Minutes

Sept. 20, 2017

GWAC Online Meeting

David Forfia opened the meeting and proposed to hold an email vote on the July and August minutes since there is not a quorum.

Ron Melton read through the agenda items.

- The first planning meeting for the GWAC F2F October meeting has been held.
- The TE framework documents is under review and will be addressed at the F2F meeting.
- The dates of the GWAC Kansas City meeting are Oct. 25 and 26. It is hosted by Burns & McDonnell at their Kansas City World Headquarters (9400 Ward Parkway, Kansas City, MO) as arranged by Doug Houseman.

The ASHRAE Winter Conference and AHE Expo will be held January 20 – 24, 2018 in Chicago, IL

The IEEE ISGT Conference will be Feb. 19 – 22, 2018 in Washington DC

Ron Melton said that he thought Farrokh Rahimi is the contact for ISGT.

Ron Melton asked if there are any other GWAC panels for the Face to Face meeting that should be considered.

Mark Knight asked all participants to try their access to the GWAC Sharepoint site located at gridarch.org. This is a helpful site for GWAC participants to find relevant materials. Ron Melton is the site owner so when joining the site participants will need to enter his email address:

Ron.melton@pnnl.gov

The agenda for Kansas City was reviewed.

Ron Melton will follow up with Tom Sloan about his participation in the Kansas City meeting and ask if there are local contacts that he would like to invite to participate.

Ron Melton also noted that it will be announced at the GWAC Face to Face meeting that Mark Knight will take over as the GWAC administrator and Ron will be stepping down. This will allow a fresh perspective on administration of the GWAC. Ron will still participate in GWAC activities and is not leaving PNNL.

James had some ideas about the Distribution Panel System for the Face to Face meeting and offered his support, and Ken Wacks did also. Mark Knight will be in contact with them.

Ron Melton noted that this discussion is more broad than just transactive energy systems or DERMS. He sees it as a timely topic and could provide opportunities to discuss TE and Interoperability challenges. It is a chance for the council to join something of broader range that addresses end uses as well.

Meeting Minutes

Sept. 20, 2017

Ron Melton reminded everyone that there will be a no host barbeque dinner the day before the Face to Face meeting for those who are interested. Ron also noted that the airport is about 45 minutes from the meeting location with time to park.

Mark Knight noted that the Roadmap will be reviewed and also the TE Framework. One of the reasons for doing the roadmap is the increase of DER deployment rates and impacts. There was a discussion around the fact that TE is a tool in the toolbox for managing more complex and diverse power systems. DER is a contributor to that complexity.

Lorenzo asked about how to change the rules to make the business models work while ad hoc changes are also being made for each business model. Is there something more systematic that we could do to address a variety of business models? He cited a few specific examples at Heather Sander's request. Not addressing these needs could be a barrier. Ron Melton told Lorenzo that he would like to see this addressed in more detail at the Kansas City meeting. Lorenzo offered to write something up about his concerns that would be shared at the meeting since he will not be able to attend in person.

Mark Knight reviewed wording for contracts which is a topic that came up in his working group with SEPA. Mark has spoken with Ron Bernstein who also has experience with this topic in his work with LonMark. Consistent contracting language in the area of Interoperability has been expressed as a need by government contracts staff.

Ken Wacks noted that a SEPA member from Wells Fargo has also expressed this concern. David Forfia noted that this was Dixon Wright but he is no longer with Wells Fargo.

Gerald Gray stated that in writing a contract for Interoperability with the "what" entity will be described in a Contract and it would refer to a standard.

James Mater said certifications, if they exist should also be included. Proper language could reduce confusion and miscommunication.

Mark Knight and Ron Bernstein have been discussing specifications associated with procurement language and also, the need for measurability.

Ron Melton expressed his appreciation of this discussion. Mark Knight expressed his support for continuing the discussion. He noted that this is primarily a DOE GMLC funded activity. The project is halfway through year two of a three year project to move interoperability forward. He suggested that if we want to continue this after the project that perhaps another body, such as SEPA could take it further after the project ends. He noted the need to look at both sides of contracting activity.

Ron Melton noted that this topic is well within the GWAC council and if there is enough interest, Mark could convene a meeting on this topic with GWAC members and other interested parties.

Mark Knight noted that he has been reading through a government RFP that uses contracting language.

Gerald Gray asked for a copy of the document

Meeting Minutes

Sept. 20, 2017

Ron Melton noted that future meetings on this topic could be very beneficial.

Heather Sanders asked about BERGER standards. An interconnection standard that references IEE 1547 IEC and also a UL code (1741 SA – James). Recently she was approached by the vehicle to grid community. She asked if there an SAE standard that would have equivalent to say the IEEE 1547 standard? She said the value to grid community is asking for this related to cars in the charging station. She is trying to understand from a regulatory perspective. Ron Melton noted that there is someone at Argonne, Keith Hardy, who should be able to help her. Ron or Mark Knight will send an introductory email to get him in touch with Heather. They have been working with him on a GMLC project. James Mater also noted that he has a contact at Chrysler, Rich Schooler. Mark Knight remembers Rich from the Interoperability meeting in Ohio, he offered to introduce her to him as well.

Actions for Ron Melton, Mark Knight, and James Mater to provide these contacts to Heather.

Liaison reports

Ron Melton - SEPA: Ron gave a summary of the Grid Architecture review scheduled for later this month.

Ken Wacks noted that six proposals were submitted to SEPA management for projects by the SEPA Home/Building/Industry-to-Grid Working Group, which he chairs. He noted the areas that will be addressed by these projects. A liaison of ISO/IEC and SEPA was created. Ken will send a letter to David Forfia about this.

David noted that there a number of proposals that will be reviewed soon by SEPA including one by Gordon Matthews.

Mark Knight - SEPA: A TE working group formed that has three key focus areas. One is bringing in the business and policy group that will address policy issues relating to TE and some other technical focus work. He has something he can email out to those who are interested.

Ron Bernstein – is working with a group on a joint language document for integration and interoperability of a standard project specification. There was a meeting on this last week.

There are 3 new standards on building automation; media types including wiring types, a high definition RF transceiver with smart grid applications, and long works over IP to do CPIP. These are going through the approval process now.

Ron Bernstein is looking for some new speakers for the AHRA, for the panel on smart buildings and smart grid, it will be in Chicago on the 24th

CABA has a new white paper on building interop, end user empowerment and David Katz was just talking with him about it on a call earlier this morning.

Ron Bernstein also reported:

Meeting Minutes

Sept. 20, 2017

1. ASHRAE and the Construction Specification Institute plan to develop a Division 25 guide spec based on ASHRAE Guideline 13. The project is an outgrowth of the TESC in Portland and work started by ARUP (David Wilts) and RBGG Consulting (Ron Bernstein) as an effort to help encourage better open, interoperable systems and more open procurement options for large building projects. Their objective is to have a Word editable Div 25 sample project specification available to all.
2. ANSI/CTA/CEN/ISO/LONMARK – 3 new control networking protocol media types are making their way through the various standards bodies simultaneously. They include:
 - a. LON over IP – LON-IP – A direct, non-tunneling port of the LonMark protocol over TCP/IP
 - b. High Definition Powerline Carrier – LON-HD-PLC – A new high speed (>1Mbps) media for buildings, smart cities, and industrial applications using existing powered wiring (AC or DC), coax, or twisted pair unpowered wires. It will enhance the data throughput for large networks by almost an order of magnitude to current technology of LON or BACnet over non-Ethernet wiring. It offers flexible, non-homerun wiring options which will reduce installation time/costs.
 - c. High Performance ISM RF – LON-ISM-RF – New RF transceiver for high speed RF over the standard ISM (Industrial, Science, and Medical) frequencies with speeds greater than 1Mbps. Use cases in smart buildings, street lighting, sensor arrays, and more where new wiring is not practical.
3. The AHR Expo is scheduled for January 24-26 in Chicago and the GWAC, GMLC, CABA, and LONMARK plan to hold a 2 hour seminar focusing on Smart Buildings and the Smart Grid. Looking for speakers representing the four organization's interests in this area now. Those interested should coordinate through Ron Bernstein
4. A new Controls Requirements Standard is emerging for Canadian Health Care Facilities that promotes interoperability, open systems, open procurement, and design based upon the Multi-Tier architecture used by the US Army Corps, ASHRAE, and others. This is a good possible language source for interoperability and open procurement objectives.
5. CABA – Continental Automated Buildings Association – Developing a new white paper on open interoperability for building automation which will define a go-forward strategy for improving adoption and removing road blocks. Objectives include defining end user education requirements, engineer support, vendor validation mechanisms, and procurement models. Paper due in Q1 2018.

Ken chaired a meeting in Belgium last week to develop ISO/IEC standards on home and building systems. They completed a standard on device interfaces for energy management that was developed by SGIP and the Consumer Technology Association (CTA) for the home industry. A liaison with SEPA was approved. Ken was reelected as chair for the next 3 years.

Gerald has a new Standard and will send it to Tom McDermott.

Heather Sanders had an open ADR question and James Mater offered to talk with her more offline. Ken also offered to talk with her about international standards.

Meeting Minutes

Sept. 20, 2017

Since no quorum was reached Ron Melton dismissed the meeting at 12:02pm PDT. Action items will be sent out via email.

Review of Action items:

Ron Melton will send out the action items and also the July and August minutes for approval by email.

GWAC members and guests are asked to try out their access to the GWAC Sharepoint site <https://www.GridArch.org> This is a helpful site for GWAC participants to find relevant GWAC working materials. Ron Melton is the site owner so when joining the site participants will need to enter his email address: Ron.melton@pnnl.gov If participants have trouble connecting they should contact Susie McGuire.

Ron Melton will follow up with Tom Sloan about his participation in the GWAC F2F meeting in Kansas City meeting and ask if there are local contacts that he would like to invite to participate.

James had some ideas about the Distribution Panel System and offered his support, and Ken Wacks did also. Mark will be in contact with them.

Lorenzo asked about how to change the rules to make the business models work but then are we making ad hoc changes for each business model. Lorenzo offered to write something up about his concerns that could be shared at the Kansas City F2F meeting since he will not be able to attend in person.

GWAC F2F: Mark Knight and Ron Melton are interested in scheduling more discussions on Lorenzo's topic.

Mark will send a document to Gerald Gray: Mark noted that he has been reading through a government RFP that uses contracting language. Gerald Gray asked Mark for a copy of the document.

Actions for Ron Melton, Mark, James to give Heather their contacts. Heather Sanders asked about inverter standards. She is trying to understand from a regulatory perspective. Ron Melton noted that there is someone at Argonne, Keith Hardy who should be able to help her. Ron or Mark Knight will send an introductory email to get him in touch with Heather. They have been working with him on a GMLC project. James Mater also noted a contact at Chrysler, Rich Schooler. Mark Knight remembers Rich from the Interoperability meeting in Ohio, he offered to introduce her to him as well.