Meeting Minutes

November 14, 2018

GWAC Members

David Forfia, Director, Enterprise Architecture & IT Transformation, Electric Reliability Council, TX

Ron Ambrosio, Chief Scientist, Utopus Insights, Inc.

Tanya Barham, Director of Operations, PEC

Stephen Knapp, Vice President of Quality Assurance & Energy Markets, Power Analytics Corporation

Farrrokh Rahimi, Senior Vice President, Open Access Technology International, Inc.

Leonard Tillman, Partner, Balch & Bingham, LLP

GWAC Members not present

Gerald R. Gray, Sr. Program Manager, Electric Power Research Institute (EPRI)

Joe Hagerman, Deputy Chief Scientist, NRECA

Doug Houseman, Grid Modernization Lead, Burns & McDonnell

Lorenzo Kristov, Principal, Electric System Policy, Structure, Market Design

Ron Bernstein, President, RBCG, LLC

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

Thomas Sloan, State Representative, State of Kansas

GWAC Associates & Emeritus

Robert Burke, Principal, Robert Burke Consulting

H. Ward Camp, EBC

Ron Cunningham, AEP

Chris Villarreal, Plugged In Strategies

Ken Wacks, Home, Building and Utility Systems

GWAC Guests

Rahul Bahadur, VMware

John Casky, NEMA

Trevor Gionet, Introspective Systems

Jeff Katz, Grid Technology, IBM

David LeVee, Powercast

Stuart McCafferty, Black & Veatch

David Wollman, NIST

PNNL Support

Mark Knight, GWAC Administrator

Susan McGuire, GWAC Coordinator

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Mark reviewed the action items from previous meetings-

Action items from previous meetings

All: please let Mark know if you will be unable to attend a call ahead of time.

Mark to talk with Leonard Tillman about the framework document

Mark to tell Jeff Katz who is coordinating the white paper (ASHRAE)

Mark: add the FERC meeting to the events list; send contact names to Jeff Katz

Mark to propose suggestion that GWAC members and associates use GWAC template when describing GWAC work and keep them in an area on GWAC website specifically for keeping GWAC member presentations.

Mark: send a GWAC website content overview out by Nov. 30

Jeff Katz – send Mark Knight the names of two IEEE conference organizers

Mark will work on getting the GWAC branding onto the IEEE web site for TESC19. And he will get the names from Chris Villarreal of people who could help GWAC find a venue in Minnesota.

Mark: schedule a call for Smart buildings and be sure to include Joe Hagerman (and also Robert Burke)

Mark will work with Rahul to set up another call while the momentum is good

Mark to ask Dave to send him more links on NIST and UCEF activities

Mark: Plan the next GWAC F2F (looking for volunteers to host)

GWAC online meeting

The group discussed the ASHRAE RFP. Mark Knight has no additional information on this right now until the bid is awarded. Jeff Katz said his group has work in that area and might be able to contribute. Mark said Jeff may want to talk with Ron Bernstein about it when he is back from his vacation in early December. Mark will pass on information if the opportunity arises.

There is a lot of interest in the revamp of the GWAC site and its ability to house GWAC branded presentations and materials. Anytime the GWAC template is used for a presentation please send a copy of it to David Forfia, Mark Knight and Susie McGuire for inclusion on the website as a resource.

Ken Wacks asked if the staff of PNNL would be doing the GWAC website refresh. Mark answered that due to security policies the website will be designed and developed in house at PNNL.

TESC 19

Mark Knight noted that July 8 – 10 will be the date of TESC19. This will not conflict with the SEPA Grid Evolution because that has been moved to the end of July for 2019. The McNamara Alumni Center at the University of Minnesota has been reserved for the conference. Ken Wacks noted that the dates are at the end of the July 4 weekend. Mark noted that just the tutorials are on Monday July 8 and the conference will start on Tuesday July 9.

Mark has made the request for GWAC co-branding. SEPA will draft an MOU for GWAC so that we can be a technical co-sponsor.

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Mark noted that most talks will most likely not be followed up with full papers. Most are just PowerPoint presentations. So the term call for papers is a bit of a misnomer.

Mark said he planned to eliminate the paper sessions and suggested a panel instead if we get lots of submissions.

Farrokh asked about possible attendance estimates. He guessed that the attendance may go up to 400 with the IEEE's involvement.

Mark thought that 250 might be more realistic. Ken thought that being on the university campus will help attendance, similar to MIT.

Mark has asked IEEE about cobranding the name of the conference with IEEE and GWAC. That was declined but GWAC branding will be included on the website once we can get an MOU in place with IEEE. Mark will sign the document.

Ken Wacks asked if TESC conference papers would be copyrighted or public domain and cited the differences between IEEE and PNNL. Mark said that since he hasn't yet seen the MOU from IEEE he couldn't answer that question but he said that based on conversations to date they expect the conference material to be available and not to go into IEEE Xplore.

Mark noted that we are still working on getting a treasurer for TESC19. Mark and Ron Bernstein have come up with a draft budget. Ron Bernstein has tentatively agreed to be the treasurer and David Forfia has tentatively agreed to be Conference chair which would be helpful because he is also an IEEE PES member. Doug Houseman will be the Industry chair, Farrokh will be the technical chair, Leonard will be the publications chair, and Gordon Matthews is tentative as plenary chair because his BPA role may not allow him to do this. Tanya offered to be plenary chair if needed or other roles. She noted that she and Gordon are both located in Portland so it would be easy for her to team with him.

Ellen Anderson, U of MN is the volunteer chair to recruit interns as volunteer help. Chris Villarreal will be a tech committee member. This could be 6 to 12 people for this role.

Farrokh asked who our IEEE contact is. It is Roseanne Jones per Mark. Susan Kovar is the other IEEE contact.

Mark showed a slide from the IEEE Website as it looks today, the dates are not final. We will work on getting the call for papers out. Farrokh asked about a call for panels which he said is typical for IEEE because they typically have separate calls for each of these activities.

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IEEE
Advancing Technology
for Humanity

The world's largest technical professional
organization for the advancement of technology

2019 IEEE PES Transactive Energy Systems Conference (TESC)

📅 **8 - 11 July 2019**

This conference brings together people interested in transactive energy systems. It includes a mix of thought leadership from national laboratories, industry practitioners, and universities and examples of pilot implementations. It is a networking event for everybody interested in learning more about implementing transactive energy systems and learning from those that have already done so.

📍 Minneapolis, Minnesota, USA | 📧 Email Organizer

Sponsors: IEEE Power & Energy Society

Call for Papers Deadline: 25 January 2019

Mark asked the GWAC to send him suggestions for keynote speakers and he will work on getting the call for papers up on the GWAC website. Then everyone can put the link on their Linked In or other websites.

Action: Everyone to send suggestions for Keynote Speakers

Action: Susie and Mark to work with Teresa Carlon to get the TESC 19 Call for Papers out on the GWAC website.

Tanya Barham noted that she and Lorenzo have been discussing how to create a marketing strategy and about the possibility of a marketing and promotion chair position.

GWAC White Papers

Mark Knight sent apologies to Robert Burke, saying that he has not yet scheduled the next call for the Smart Buildings white paper.

The Valuation white paper call has not yet been set up yet. Mark Knight has been talking with Rahul Bahadur, Farrokh Rahimi, and Dave LeVee about it.

Mark has not yet gotten the links about the UCEF activities and NIST. Dave Wollman will send/has sent it to him.

Action: Mark to ask David Wollman to send links to the UCEF activities and NIST (listed below)

- Our main UCEF webpage (collaboration site) is at https://pages.nist.gov/ucef/ (and it gives info on our webinar series, third Thursday of the month mid-day).
- A NIST webpage with a more readable description of UCEF is at https://www.nist.gov/el/cyber-physical-systems/ucef-universal-cps-environment-federation

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Conferences and Events

(**Bold** indicates GWAC speakers)

- **4 Regional NIST/NARUC Meetings**
  - September. 12 at the Georgia PSC SE region
  - Sept. 27 for the Indiana Utility Regulatory Commission in Indianapolis for the Midwest region
  - San Francisco for the CA PUC Oct. 16, West region
  - Nov. 29 in Warwick RI for NE region
- **Powergen International, Orlando, FL, December**
- **ASHRAE Winter Conference, Atlanta, GA, Jan 14-16**
- Smart Energy Summit, Austin, TX, Jan/Feb
- **DistribuTECH, New Orleans, Feb 2019**
- **IEEE ISGT, Feb 2019**
- **TESC, Minneapolis, July 8-10**

Upcoming Meetings and Events

Mark Knight thought that in late Jan. or early Feb. would be a good time for a F2F meeting. A room for 30~ people is needed. Tanya Barham spoke up and said that she should be able to host it in Portland. Aaron Snyder said that EnerNex and EPRI should be able to host it in Knoxville. David Forfia offered to check with ERCOT. Ron Cunning ham said that he will look to see if he can find a spot between Texas and Oklahoma. Mark will follow up with everyone to see what might work out.

Action: Mark to follow up with everyone who offered a spot for the next GWAC F2F meeting.

Ken noted that this meeting would be in between DistribuTECH (Feb. 5-7) and ISGT and also the Smart Energy Summit the week of Feb. 18). Mark would like to get a full meeting but if not maybe they would get a side meeting at the ISGT.

Mark has not updated the events slide yet.

Grid 3.0 Workshop

Mark noted the success of the Grid 3.0 workshop. It didn't go quite the way it was planned. The breakout sessions didn't happen on the first day. There was a good mix of attendees from different aspects of the grid industry.

Mark showed a slide summary of the exit poll. The topic of resilience was discussed as to what is resilience.

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Mark Knight noted that DER is a big piece of the future and the GWAC needs to make that a central theme with resilience.

Some circles think resilience only has to do with cyber security.

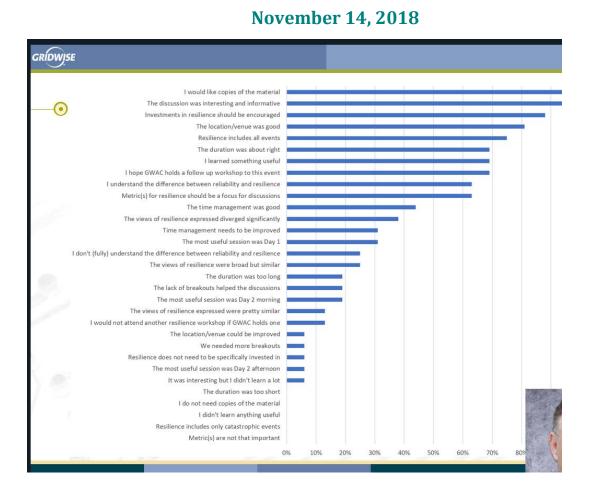Stephen Knapp asked what does this mean to the end user and to the system.

Stuart McCafferty stated that NIST has been working on resilience for some time. Eric Guenther and he wrote a chapter on electric power systems and resilience. There are processes to measure resilience. He referred to the NIST community resilience planning guide.

Mark Knight noted that ANL has done work on resilience and said that in 2012 the Software Engineering Institute has a whole maturity model on resilience management. It's been around for a long time. He appreciates the cyber comment, and added that questions such as how do you avoid failures in the first place? Or how do you recover quickly are relevant. Today more focus is on how to avoid the failures in the first place. Cyber has recently taken a big focus. Mark asked Stuart McCafferty to send him the NIST link that he mentioned.

David Wollman said he understands there is more interest now on pre-event actions. He agreed that more work is needed to articulate how we want resilience.

Mark said this sounds like the discussions on day 2 of the workshop on hardening and robustness.

Mark said the origin of the word resilience means something like to bounce back. But there is a variety of opinions about what resilience is. Mark agrees that we need to focus on more than just preventing incidents from happening.

Ward Camp discussed block chain and the transaction grid. His group is gathering use cases and vetting them with stakeholders. They are trying to avoid hype. They want the energy industry to know what is out there. TE is clearly is a component piece of this.

Trevor Gionet said his group is working on this and he would like to know more.

Mark Knight shared information that he obtained at the Blockchain conference in Orlando. It was an announcement from DOE's Chris Irwin. Chris noted a DOE has a $200K budget for phase I blockchain projects for an operational grid. Phase II would be a higher budget. They are interested in novel approaches for blockchain that has a path forward for commercialization. He is hoping to get a group of reviewers for the FOA applications. This is a small business tech transfer program. The date due is early December. Mark was relying on memory for these details. If someone is interested they should contact Mark and he will send them the document. Monday Dec. 17 is the due date Mark noted.

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Liaison Reports

David Wollman said that the Smart Grid and Cyber workshop has been going on at NIST this week. He will provide updates from these meetings.

Ken Wacks - ISO IEC– the next meeting is the first week in April in Sweden. If GWAC has documents that they wish to publish internationally Ken can help with that.

David Forfia - SEPA – work plan review with the advisory council is this Friday. It is an ambitious list of potential projects. This should be an interesting advisory council discussion.

David Forfia has another GWAC article that he is working on for NEMA. This will go on the GWAC website when published. He is working with Ron Cunningham and Leonard Tillman on it. It is due in January.

Leonard Tillman gave the motion to adjourn the meeting, Tanya Barham seconded the motion. David Forfia asked if there were any objections to ending the meeting early. Hearing none, David noted that the next meeting will be Dec. 19 and he wished everyone a happy Thanksgiving holiday and closed the meeting.