

## Meeting Minutes

Jan. 17, 2018

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### GWAC Members

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

Ron Ambrosio, Chief Scientist, Utopus Insights, Inc.

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

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

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

### Members Not Present

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Tanya Barham, Director of Operations, PECl

Ron Bernstein, President, RBCG, LLC

Doug Houseman, Grid Modernization Lead, Burns & McDonnell

Stephen Knapp, Vice Pres. of Quality Assurance & Energy Markets, Power Analytics Corp.

Lorenzo Kristov, Electric System Policy, Structure, Market Design (retired)

Paul De Martini, Managing Director, Newport

Consulting Group, LLC

Heather Sanders, California Public Utilities Commission

Tom, Sloan, State Representative, State of Kansas

### GWAC Associates & Emeritus

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Chris Villarreal, Plugged In Strategies, Associate

Robert Burke, Emeritus

Ken Wacks, Home, Building and Utility Systems

### Guests

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Rahul Bahadur  
Ron Cunningham  
David Katz  
Dave LeVee  
Aaron Snyder  
Anjali Wadhwa  
David Wollman

### PNNL Support

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Mark Knight, GWAC Administrator  
Susie McGuire, GWAC Coordinator  
Ron Melton

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### GWAC Online Meeting

Mark Knight reviewed the meeting agenda noting that the number of GWAC members on the call did not reach a quorum.

Mark Knight read the list of administrative business actions and the status of each. He reminded everyone that the TE Framework document is located on the GWAC website, and he is looking for suggestions for edits needed from the council. Likewise if anyone would like to contribute a suitable graphic for the Framework document please contact him.

Mark reviewed the status of the TE Framework and the teams assisting with this process.

The group briefly discussed AHR Expo taking place next week.

Mark Knight recognized David Forfia as the confirmed GWAC chair for 2018. The DOE has approved his nomination for 2018. Mark thanked David for his service to the GWAC over the last 3 years.

The call for new GWAC members has been extended until Jan. 31, 2018. The call is listed on the GWAC website [www.gridwiseac.org](http://www.gridwiseac.org)

Mark Knight recognized former GWAC member Mark Kerbel's passing. He was a GWAC member from 2014 to 2015. David Katz also recognized the character and achievements of Mr. Kerbel.

Mark reviewed the upcoming conference list. He announced that GWAC F2F will be held Thurs. Feb. 22 from 3pm to 7pm right after the end of the IEEE ISGT. Farrokh was very instrumental in getting space for this meeting through his contacts at IEEE.

- AHR Panel Chicago January 22-24
- DistribuTECH San Antonio January 23-25
- ISGT February 19-22 Washington DC
- GWAC F2F February 22 at ISGT, Washington DC
- IEEE PES T&D Expo Denver April 16-19
- TESC 2018 MIT Cambridge June 12-14

James Mater noted that he would not be able to attend this meeting.

TESC 18 update – plans are underway, the contract should be signed soon between MIT and SEPA. The campus building location has been decided. Ken Wacks noted that one of the potential locations is one of the premier buildings on the MIT campus.

The call for papers is out on the GWAC website. Mark asked the GWAC for their help in socializing this. A program committee will be formed soon.

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Mark told the GWAC to expect to see TESC18 sponsorship packets by the end of this week. SEPA and the TESC18 organizing committee are working on this. Sponsorship will help with the cost of the facilities which is not something that the GWAC has had to pay in the past thanks to Portland General Electric for providing space at no cost. The organizing committee is trying to keep the registration cost similar to past years but they are still reviewing the numbers. The conference website will be ready soon.

SGNW has been very helpful with the 2018 conference and have offered their support to the planning.

Mark reviewed the role of SEPA and GWAC in the planning and organizing process. Dave Katz asked about the role of SEPA related to Transactive Energy. (He mentioned having sent a TE doc to David Holmberg). David also noted that the Advanced Energy Center where he works is a SEPA member. He noted that having this conference so close to Toronto may enable them to participate this year.

James Mater noted that SGNW won't have as much of a role in this conference. Mark agreed that this meeting is not in their region. While it's not feasible for them to lead this conference located on the east coast we might find a role for them with the conference. Mark will be in contact with them.

Ken Wacks noted that if the SGNW would like to keep their past four years contributions recognized, it is in their best interest.

James Mater said that good speakers and a good program would keep Oregon and Northwest participants inclined to travel to Boston for the 2018 TESC. James also noted that various sponsorship levels may attract some of the previous northwest sponsors. Mark Knight suggested that he and James discuss this more offline and brainstorm it.

Ron Ambrosio joined the call, and Mark Knight noted that with the two online December meeting minute approvals from Ron Bernstein and Tanya Barham, this makes a quorum with regard to approving the December meeting minutes. An edit suggested by Farrokh should be included; Susie noted that she has made that change on her copy. David Forfia asked for a motion to approve the GWAC December minutes. Farrokh Rahimi made a motion, and Gerald Gray seconded the motion.

The TE Roadmap has been published. It is listed on the GWAC website under publications.

The TESC17 proceedings is close to finalization and should be published next week.

Mark noted that Gerald Gray is not assigned a section of the revision of the TE Framework. Mark suggested that Gerald work on the Conceptual Architectural area and Gerald agreed to do so.

James Mater said he had not expressed interest in helping. However, he said he could assist in the future. Mark will utilize him where he is needed.

Mark Knight commented on the current GWAC website. He noted that it has some older content and the format is a bit dated. He has been hoping to do some updates depending on available PNNL funding for it. Mark has an action item for himself to plan for a restructure and to request future DOE project funding support. The goal is to have a friendlier format with updated functionality and appearance.

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Mark Knight noted two recently published GWAC documents, the Decision Maker's Checklist and the TE Roadmap. He noted that these are large, complex documents and that it was not possible for all GWAC members to contribute to them. Mark proposed moving to a system of smaller, targeted topics with smaller GWAC teams to produce them with the outcome of shorter white papers (4 to 6 pages) on specific topics of that could be put together in just a few months. The topics would need to be well aligned with what the DOE considers helpful, and should take advantage of the strengths and experience of the GWAC team. Mark asked the group for their thoughts on this and also to suggest some topics for these white papers.

The idea was seen as logical and practical for the council. Ron Cunningham commented that since the GWAC is part of the GRID 3.0 leadership effort there are some future states that were identified on that effort that the GWAC has not gotten close to talking about. This would be a list of 14 or 15 things. He will send this list out to the group. Ron Melton has it also and will send this list to Mark Knight. Ron Melton suggested an offline call with Ron Cunningham and Mark Knight to take a look at the list for possible topics.

Dave LaVee offered the concept of an economic valuation metric to look at the effectiveness of different GridWise options.

David Forfia suggested a compare and contrast of DSO to traditional model and the applicability of both under different scenarios.

Mark Knight also suggested a document that he had worked on involving microgrids that he started with Robert Burke. David Forfia also worked on it but it was never finalized. This might be a good one to pick up where they left off.

Farrokh Rahimi suggested the relationship of TE and Smart Cities as well as how this relates to the Internet of Things.

Ken Wacks offered to mention this effort at an upcoming meeting that he will attend on international smart cities. He might be able to get some additional participants from a group that he is involved with.

David Katz asked more about the intent, he is involved with a smart city challenge with CABA. Mark Knight asked if David has some ideas for what the GWAC could pursue, so as not to duplicate the efforts. Mark noted some specific ideas that could be pursued such as looking at individual elements such as optimization across commodities. You could look at a specific set that you are trying to optimize such as with a city where you have water, oil, and transportation where you are trying to create value. He envisions focusing in on a specific challenge, as a deep dive.

Farrokh agreed with the concept of papers targeted to specifics such as in the area of transportation and electricity in the form of peer to peer transactions.

Ron Ambrosio expressed interest in participating in microgrids.

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Dave LaVee added to his previous comment that rather than something universally applied to all different alternatives for metrics, maybe target from the customer value standpoint where there are various economic considerations and examine how they compare.

Mark asked everyone to send an email to him on suggested topics and copy to Susie McGuire.

### Liaison Updates

David Forfia noted that his term with SEPA has ended but he is still chair of the Technical Advisory Council. He noted the value of the workgroups of SGIP and now SEPA.

Ken Wacks – The next international standards meeting is March 19 in Toronto Canada. Any papers that we would like the ISO IC to publish Ken would be happy to start socializing any topics now and present a paper later, he would be happy to do that. Mark Knight noted that the TE Framework is not yet ready. Possibly a white paper concept once we select one might be good. Ken said he is flexible if this information is provided closer to the meeting date he could work with it.

At 11:18 Pacific Time Chair David Forfia asked for a motion to close the meeting. Ron Ambrosio gave the motion and Farrokh Rahimi seconded the motion.

### Actions:

Mark will add the [IEEE PES General](#) meeting to the meeting list.

Council members with edits or graphics for the TE Framework revamp should send their suggestions to Mark Knight

Mark would also like to talk with David Katz to learn more about the advanced energy center.

Mark will talk more with James Mater about how to encourage past northwest based sponsors to travel to attend the TESC18 in Boston.

Mark will schedule a call with himself, Ron Cunningham and Ron Melton to the list from GRID 3.0 on future states of Transactive Energy. The future states list will be sent out to the GWAC.

All members are asked to send ideas for white paper topics to Mark Knight and to copy Susie McGuire