GridWise® Architecture Council

Meeting Minutes January 20, 2016

Members

Ron Ambrosio, IBM T.J. Watson Research Center Ron Bernstein, Ron Bernstein Consulting Group, LLC

David Forfia, Electric Reliability Council of Texas (ERCOT)

Gerald Gray, Electric Power Research Institute (EPRI)

Doug Houseman, EnerNex

Mark Kerbel, REGEN Energy Inc.

Mark Knight, CGI

Stephen Knapp, Power Analytics Corporation

James Mater, Quality Logic

Heather Sanders, Southern California Edison

Tom Sloan, Kansas State Legislator

Ken Wacks, consultant to Sensus Metering Systems Inc.

Carl Zichella, Natural Resources Defense Council

GWAC Associates

Gordon Matthews, Bonneville Power Administration Farrokh Rahimi, OATI

GWAC Members Emeritus

Erich Gunther, EnerNex

Support – Pacific Northwest National Laboratory (PNNL)

Ron Melton, PNNL Sherry Kowalski, PNNL

Guests

Ed Cazalet, TeMix Inc.

William Cox, Cox Software Architects
Michael Danziger, Deloitte Consulting LLP
David Katz, Sustainable Resources Management
Larry Lackey, Coergon Group, LTD.
Dave LeVee, PwrCast Inc.

Mark Patterson, CSIRO

Chris Villarreal, Minnesota Public Utilities

Commission

Dave Wollman, NIST

Administrative

Welcome and Administrative Business

Ron Melton, GWAC Administrator

Meeting was called to order at 10:03 a.m. Ron Melton reviewed the agenda and read the proprietary information disclosure policy according to the bylaws to the GWAC members and guests.

Calendar Review

The 2016 Web Meeting dates have been set as follows:

- January 20, 2016 10:00 a.m. to 12:00 p.m. Pacific
- February 17, 2016 10:00 a.m. to 12:00 p.m. Pacific
- March 16, 2016 10:00 a.m. to 12:00 p.m. Pacific Ken Wacks has a conflict and asked if the meeting could be moved back a week.
- April 13, 2016 10:00 a.m. to 12:00 p.m. Pacific

GWAC Events:

 May 17 - 19, 2016: 3nd Transactive Energy Conference, World Trade Center, Portland Oregon

Minutes

The December 16, 2015, web meeting minutes were distributed to the Council by email for review and feedback. Two corrections were notes regarding the affiliation for Stephen Knapp and Heather Sanders. Gerald Gray motioned to accept the minutes with the corrections. Stephen Knapp seconded the motion and the minutes were approved.

ISGT 2016 Panel Session Proposal

The Seventh Conference on Innovative Smart Grid Technologies (ISGT 2016), sponsored by the IEEE Power & Energy Society (PES), will be held on September 6-9, 2016 at the Radisson Blu Hotel in Minneapolis, Minnesota.

Call for Candidates

The GWAC call for new candidates has been extended to February 15, 2016. The current members under consideration for membership are as follows:

- Ron Ambrosio
- Doug Houseman
- Mark Kerbel
- Mark Knight
- Heather Sanders
- Tom Sloan
- Ken Wacks

GWAC members whose terms are expiring need to notify the GWAC Administrator via email of their intent and if they wish to be considered to continue membership. The goal for GWAC membership is to have a 25% turnover (new members) – 2 new members in this case. Looking to candidates with good buildings experience and distributed energy systems DSO.

Heather Sanders knows of a few consultants that may have the proper qualifications, Mark Patterson Recommended John Ward from CSIRO.

GWAC By-Laws call for a five person selection committee that consists of:

- 2 continuing GWAC members
- DOE program manager
- GWAC Administrator
- Outside 3rd party (historically this has been a member from NIST)

The official Call for Membership Applications will be circulated in the next few weeks. Membership application materials are available at:

http://www.gridwiseac.org/call_for_candidates.aspx. The revised deadline for applications is February 15, 2015.

GWAC Chair Nominations

GWAC Chair is selected annually and the nominations now open until January 27, 2016. GWAC members were asked to send nominations to Ron Melton via e-mail (ron.melton@pnnl.gov). Nominations by two members is required to be a candidate. Voting will be conducted via e-mail according to previously established process (depends on number of nominees.) After voting DOE concurrence will be requested.

Ron Ambrosio and Heather Sanders nominated David Forfia for his second term as Chairman.

GWAC Planning for FY 16 and FY 17

Ron Melton and Chris Irwin have met to begin planning for this year and next year. The topical areas under discussion:

- Interoperability
- Grid Architecture
- Transactive Energy
- DER Integration

The Council's general objective is to provide thought leadership and SGIP is to facilitate execution.

Further discussions are planned between Ron Melton, Chris Irwin and the Chairman, David Forfia. The plan then can be presented to the Council for full discussion, and to prioritize and define tangible outcomes for topical areas such as workshops, webinars, publications, and documents.

PNNL and Ron Melton are to determine the budget requirements.

The next GWAC face-to-face meeting will focus on planning efforts. Ron Melton asked the Council for ideas on venues and dates. Discussion continued and the following notes and actions were captured.

- Sherry Kowalski will facilitate a Doodle Poll to determine the best date for the face-to-face meeting.
- Dave Katz suggested Canada, at the Marriott Airport because of the affordability.
- Ron Bernstein suggested a possible coordinating with the CABBA event in San Diego April 26-28.
- Ron Ambrosio took an action to looking into IBM hosting the meeting at Watson Center in NY.
- Ron Melton took an action to see about NIST hosting the meeting in Boston, EEI in Washington, DC, and OATI in St. Paul.
- Ken Wacks took an action to see about MIT hosting the meeting in Boston.

Conference and Event Planning

Innovation Smart Grid Technologies Session

The Seventh Conference on Innovative Smart Grid Technologies (ISGT 2016), sponsored by the IEEE Power & Energy Society (PES), will be held on September 6-9, 2016 at the Radisson Blu Hotel in Minneapolis, Minnesota. The program has room for 24 panel sessions and it is possible to have more than one panel on transactive energy. Farrokh Rahimi is organizing a panel and has asked that Sherry Kowalski distribute the information to the Council. Please contact Farrokh Rahimi if you are interested in participating in the panel.

AHR - Agenda and Speakers

Ron Bernstein reviewed the AHR Slide deck, reviewed the speakers and topics that will be presented at the AHR expo on January 25, 2016. This session will discuss the state of the transactive energy market as it relates to smart building automation systems.

Session speakers include:

- Ron Bernstein Moderator
- Ken Wacks Home Systems
- David Holmberg NIST
- Tracy Markie Engenuity/Small Box Energy

The topics for the sessions include:

- GWAC update
- GWAC Conference in May
- Decision Makers Checklist
- TES for Building Automation
- Drivers
- Opportunities
- Session content discussion

- Introduction to GWAC Ron Melton
- Standards perspective Ken Wacks
- Regulator/End user perspective David Homberg
- Review relevant info from TE Challenge relating to buildings, end users, energy demand
 David Homberg
- Product vendor perspective Tracy Markie
- Supplier/integrator perspective Tracy Markie

Sherry Kowalski took an action to circulate an announcement about the GWAC AHR Expo seminar to the GWAC mailing list.

Transactive Energy Systems Conference and Workshop

Recap

- Name modified to Transactive Energy Systems Conference and Workshop or #TES2016 for the short name / hashtag name
- The theme Transactive Energy Systems: Harnessing Flexibility in an Evolving Electric Power System
- The conference has been extended to a three-day meeting keep workshop element
- Incorporating NIST TE Challenge Summit into program
- Hybrid approach to the program including Call for Papers responses as well as invited panelists
- Building on questions from OATI meeting
- Organized around 3 dimensions:
 - o Regulatory / environmental / governmental
 - Benefits to influencers
 - Utility Perspectives
 - Reliability
 - Economics and business models
 - Technology and Solutions
 - Enabling prosumers and consumer considerations
 - o NIST TE Challenge Summit
- Planning to have an International Panel again and will include Dave Katz and Mark Paterson

New Business

Planning continues on the Transactive Energy Systems Conference (#TES2016). The Organizing and Planning Committees have been meeting regularly. The Call for Papers is open and abstracts are due January 31, 2016. Ron Melton encouraged the Council to help to disseminate information on both the conference and Call for Papers.

Tutorial session

- Doug Houseman, Ron Bernstein and Farrokh Rahimi are interested in arranging a GWAC
 Tutorial
- A suggestion was made for the Program Committee to reach out to New York regulators as possible panelists.
- Erich suggested reviving some simple animations, etc. to help explain transactive energy.

Next Steps

- Endorsements: The Council and Organizing Committee are currently seeking endorsements.
- Conference DOE Approval: Chris Irwin has an action to help obtain DOE Conference Management Approval.
- Sponsorships: Smart Grid Northwest has an action to identify and secure conference sponsorships.
- Keynote Speakers: Program Committee has an action to develop a program and identify keynote speakers.
- International Panel: Program Committee has an action to identify and secure a panelist for an international panel.
- GWAC Foundational Session: GWAC has an action to develop the foundational session.

Technical and Policy

Transactive Energy Decision Maker's Checklist

Ron Melton, GWAC Administrator, Mark Knight, GWAC Member

Work continues on the Transactive Energy Decision-Maker's Checklist, comments are in hand from first round of reviews and integration and resolution of those comments should have been completed by November 18, 2015. A full GWAC member review – comments were to be completed by December 4, 2015. The draft document was to then be cleared for public distribution and circulated for comments on December 11, 2015. These deadlines were missed due to conflicts. Ron Melton asked for assistance in completing the draft checklist. Ron Melton is finalizing the draft and will distribute to the Council for feedback by Feb 15, 2016. The plan is to clear the document for public distribution by March 1, 2016.

GWAC Grid Architecture

Ron Melton, GWAC Administrator, Mark Knight, GWAC Member

Very productive workshop in early December, but there is still more work to do. Jeff Taft, Erich Gunther and Ron Melton have been discussing the possibility of another workshop with the same participants. This meeting will likely be held at PNNL.

Heather Sanders shared that Southern California Edison will be rolling out their architecture for the future.

Interoperability Workshop Recap

Ron Melton, GWAC Administrator, Mark Knight, GWAC Member

Tulsa workshop 40 actions that need to be taken for interoperability. Clearly state the business cases for interoperability. This could be a possible work item for GWAC. Focus on upper and middle layers of the GWAC Stack. Erich Gunther is finalizing the summary material that will be placed on the NIST Grid 3.0 website. Chris Villarreal agrees on the importance of a business case for interoperability and he may be able to bring in NARUC on the interoperability topic. Gerald Gray - this will be a topic at EPRI this year looking at standards vs. proprietary. This will come out of Don Von Dollen's working group.

IEEE PES Journal Article

Ron Melton, GWAC Administrator, Mark Knight, GWAC Member

Ron Melton, David Forfia, and Mark Knight are working on a journal article for a IEEE PES Magazine Special Issue on Transactive Energy titled "The GridWise® Transactive Energy Framework – Building the Community of Practice".

Action List

- Sherry Kowalski is to look into the possibility of moving the March GWAC meeting back one week to accommodate Ken Wacks schedule.
- GWAC members whose terms are expiring need to notify the GWAC Administrator via email of their intent and if they wish to be considered to continue membership.
- Sherry Kowalski is to send the Distribution Systems in High Distributed Energy Resources Future report link to the Council.
- Ron Melton is to provide an updated schedule for completing the Transactive Energy Decision Maker's checklist.

Adjourn

Stephen Knapp moved to adjourn the meeting, Ron Ambrosio seconded the motion and the meeting adjourned at 11:28 a.m..