Meeting Minutes

January 21, 2015

Members

Ron Ambrosio, IBM T.J. Watson Research Center
David Forfia, Electric Reliability Council of Texas
(ERCOT)
Mark Kerbel, REGEN Energy Inc.
Mark Knight, CGI
James Mater, Quality Logic
Tracy Markie, Engenuity
Ken Wacks, consultant to Sensus Metering
Systems Inc.

Members Not Present

Ward Camp, Landis + Gyr
Jeff Gooding, California Edison
Heather Sanders, CA-ISO
Doug Houseman, EnerNex
Tom Sloan, Kansas State Legislator
Jeff Taft, PNNL

Associates

Stephen Knapp, Power Generation Services, Inc.
Gordon Matthews
Farrokh Rahimi

Support – Pacific Northwest National Laboratory (PNNL)

Sherry Kowalski, PNNL
Ron Melton, PNNL
Abhishek Somani, PNNL

Speakers and Guests

Ali Apakchi, OATI
Haw Asgerisson, DTE Energy
Ed Cazalet, TeMix, Inc.
Dan Lubar, Relay Services
David LeVee, Pwrcast
Dean Prochaska, NIST
Leonard Tillman, Balch, Inc.
Michael Danziger, Deloit

Administrative

Welcome and Administrative Business

Ron Melton, GWAC Administrator

Ron Melton called the meeting to order at 10:08 AM.

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

GWAC Chairman Selection

The Council thanked Mark Knight for his service as the GWAC Chairman for two consecutive terms and welcomed David Forfia as the new Chairman elect.

Review of Action Items
Ron Melton, GWAC Administrator

- TE Decision Makers Working Group to meet. The group met on 11/14/2014.
- Doug Houseman and Erich Gunther to continue to work on the effort to have the Interoperability Context Setting Framework as an IEEE technical document - Ongoing
- Doug Houseman and Jason Crabtree are continuing to work on the Transactive Energy Cyber Security paper.
- Ron Melton, Mark Knight and Mark Kerbel have finalized revision/edits on the Transactive Energy Framework and are to distribute to the Council for review. Update on this effort will be provided later in meeting.
- Doug Houseman is continuing to lead the GWAC Mutual Assistance / Emergency Response working group.
- Ken Wacks and Ron Ambrosio are continuing to work on the GWAC Interoperability Context Setting Framework as an ISO/IEC Standard effort. An update on this effort will be provided later in the meeting.
- Council is continuing to urge qualified candidates to submit an application packet, which is due by the end of January.

Approval of Minutes
Ron Melton, GWAC Administrator

The September face-to-face meeting and workshop proceedings are approved and will be posted on GWAC website.

The October, 2014 web meeting minutes were distributed to the Council by email for review and feedback. A quorum was not established and the minutes will be approved at the February web meeting.

GWAC Budget
For FY15 (Oct. 2014 – Sept. 2015) we have very limited funds
Impacts:
- No further GWAC member travel support
- Only one full face-to-face meeting remainder of FY15
- Defer 3rd TEC to 2016
- Working with Chris Irwin to explore ways to get additional funds

Call for Candidates
Some applications received

Please encourage additional applications within your professional networks. Applications are due at the end of this month.

Calendar Review

GWAC 2015 Web Meetings:

- February 25, 2015, 10AM-12PM Pacific

GWAC Face-to-Face Meetings:

- March 25, 2015, 12PM – 5PM at NIST, Gaithersburg, MD
- May 12-13, 2015, OATI, Redwood City, CA (2 full-days)

Related Events:

- February 18-20, 2015, ISGT – 3 Panels on Transactive Energy at conference
    - Ron Melton panel on the morning TE as Farrokh Rahimi, Houseman, Taft
    - Changing , Robert Sherick, Doug Kim
    - George Hernandez
    - Ron Ambrosio is on two panels not related to transactive energy
- March 3-5, 2015, Smart Grid Week India, Bangalore
- March 24 – 25, 2015, NIST TE Challenge Preparatory Workshop – contact: David Holmberg
- March 26 – 27, 2015, Grid 3.0 Workshop at NIST – contact: Dave Wollman

Conference and Event Planning

Decision Maker's Check List Planning

GWAC Working Meeting at NIST on March 25th, 2015, 1PM – 5PM. All GWAC members and Associates welcomed and encouraged to contribute.

TE Checklist Working Group Members:

- Mark Knight, CGI, GWAC
- Ken Wacks, Sensus Metering Systems, GWAC
- James Mater, QualityLogic, GWAC
- Larry Lackey, TIBCO
- Mark Paterson, CSIRO
- Gordon Matthews, BPA, GWAC Associate
- Dave LeVee, PwrCast
- Erik Desrosiers, Harvard Kennedy School
- Ron Melton, PNNL, GWAC
- Ron Ambrosio, IBM, GWAC

GWAC half-day meeting at NIST on March 25th, 1PM – 5PM. The focus of working meeting is to prepare for TE Decision Maker's checklist at May workshop at OATI. Some of the thoughts that will be put-up for discussion are as follows:

- Desired outcome of OATI Workshop?
- What topics at OATI workshop?

- Who do we need to invite?
- Structure - balance between presentations, discussions and brainstorming.

Decision Makers Checklist
- Working group was formed and first meeting was in November 2014
- Next call scheduled for Wednesday, January 28
- Plan for a February call also before the F2F @ NIST

Mark Knight provided a summary and listed the discussion items from of the November 14, 2014 meeting.
- Need to communicate the value of the work
- Will require a common metric for valuation
- Describe typical problems
- Must be tied to the Transactive Energy Framework
- Policy & Behavioral Economics is a factor; Mark Knight received a white paper from Mark Paterson
- Larry Lackey circulated an article titled "Getting Science into the Hands of Policy Makers" for committee members to read before the next committee meeting

November Meeting agreed upon items:
- To hold regular calls starting in January.
- To hold a mini-workshop in March at NIST and a full workshop in May hosted by OATI. Committee to provide feedback at GWAC meetings.
- A suggestion was made to possibly create a Policy advisory group review and critique materials.
- Decide and document who the target audience is and what their challenges are.
- Do common themes exist?
- What do they need to know?
- Ron Ambrosio suggested that the Council take this information to discuss with Policy Makers at the upcoming Transactive Energy Conference. Mark Knight has the names of a few individuals that expressed interest in joining the Policy advisory group that was previously listed.

May Face-to-Face Transactive Energy Decision Makers Checklist Workshop is planned for May 12-13, 2015, and will be hosted by OATI in Redwood City, California. Hotel arrangements are currently underway and Sherry Kowalski will provide the details to the Council as they become available. Expected attendance is approximately 50 participants, so seats will be limited. PointView will be used to manage the conference.

Jeff Morris, a State Representative for the State of Washington, posted a LinkedIn discussion with link to legislation he is proposing to the State of Washington. It includes an element which lays the groundwork of transactive systems related to feed-in tariffs and roof-top solar panels

integrated into the electrical system. Ron Melton encouraged the Council to follow the discussion on the LinkedIn Transactive Energy Association page.

India Smart Grid Week, Bangalore 03/06/15

Reji Kumar is the president of the India Smart Grid Forum and he was a speaker on the International panel at the December 9-10, 2014 Transactive Energy Conference. Dr. Kumar invited Mark Knight to speak at Smart Grid Week India in Bangalore March 3-5, 2015. Mark Knight is unable to attend and offered the speaking slot on the Standards and Interoperability panel, chaired by Richard Schomberg. Interested Council members were asked to contact Mark Knight or Ron Melton.

Transactive Energy Conference 2014 Recap

Actions:

There is an action for the Transactive Energy Conference Panel and Workshop leaders to join for: Panel session / workshop leaders provide a short write up summarizing the results – key points and takeaways.

The lists that were generated at the conference will be incorporated in appropriate areas of the proceedings draft, and posted at gridarch.org. Ron Melton asked those who have issues with SharePoint access to contact Sherry Kowalski for assistance.

Feedback

The Council discussed the Transactive Energy Conference looking for feedback to improve future conferences.   The Council received very good feedback for the International and Regulatory Panels. The International Panel showed great diversity.

The Regulatory Panel was very interesting, and having participants from legislature and/or sections of Government that had a positive attitude towards transactive energy and the opportunity to receive their feedback was extremely powerful.

Comments were received that the auditorium did not work well for the workshop portion of the session, and suggestions were made to break up the audience into smaller rooms.

Future TEC

Assuming 2016 Transactive Energy Conference would be held in Portland, Oregon. General Electric has agreed to provide meeting space again and Smart Grid Northwest will host. The anticipated timeframe for the conference would be a date in spring 2016. Since the format seems to be working well, GWAC would keep the conference/workshop format.

The first course of actions would be to choose a date and develop schedule for preparation – minimizing effort required before October 2015.

Communication Matrix

The purpose of the communication matrix needs to convey a consistent message in regards to transactive energy as well as other topics. A GWAC group was formed, and developed the GWAC Communication Matrix. The matrix is on the GWAC SharePoint site under the outreach tab. Mark Knight reviewed the components of the matrix with the Council. Mark Knight suggested that we reschedule 30 minute monthly calls.

Technical and Policy

Mutual Assistance / Emergency Response

Ron Melton GWAC Administrator

A GWAC working group on mutual assistance and emergency response has been created to survey the landscape to see what type of inputs GWAC might be able to provide in this industry discussion. Doug Houseman has created a charter and is currently seeking involvement from other sources. A small core team is now meeting via phone on Friday every other week, which includes Doug Houseman, Ron Ambrosio, Mark Knight, and David Forfia. They discussed these at the Emergency Response Working Group Call on Jan 16, 2015. The holidays slowed progress but work is moving forward. The group has an initial draft of nine use cases. The group has invited anyone to help review, edit, discard, update, and create on the document. The group plans to meet at DistribuTech on Monday, February 2, 2015 in the conference center lobby at 3PM to review the draft.

Transactive Energy

Mark Knight, GWAC Chairman

Function View Document

The Council is to write a transactive energy framework follow-on paper that describes the functional view of transactive energy.   This paper would take a different look to make it more easily understood for utility executives.

Would like to translate foundational session example into some sort of infographic – the "day in the life of a transactive grid" slides into some sort of info graphic.

Ron Melton asked the Council to send in suggestions and ideas for this document's content and format.

Cyber Security Report Update

Informational meeting between Jason Crabtree and Doug Houseman planned at DistribuTech.

TE Framework

Mark Knight, Ron Melton and Mark Kerbel are actively working on the Transactive Energy Framework final edits. The Framework should be ready for release by the end of January, 2015.

GridWise Architecture Council Interoperability Context-Setting Framework

IEEE Update

No update provided.

ISO / IEC Standard Update

Ken Wacks, GWAC Member

Recap: Mark Knight offered the GridWise Architecture Council Interoperability Context Setting Framework as an ISO/IEC technical report on August 1, 2014. Ken Wacks prepared and posted a document titled "The GridWise Interoperability Setting Framework submitted by the GridWise Architecture Council" on the International ISO/IEC Standard distribution board. The document requests that the GWAC Context-Setting Framework be considered as an ISO / IEC standard. Ken Wacks and Ron Ambrosio presented and explained the request to the ISO/IEC experts in Beijing on September 15, 2014.

Update: The Framework was received positively by the ISO/IEC experts and the administrator asked for a review by the IEC grid interface experts which will start in November, 2015. Ron Ambrosio sent an email to Peter Forstall, who is on the Technical Committee 21 Working Group 19 as to why the Council feels the framework document should be published as a technical report, because it's referenced broadly. No response received to date but Ron Ambrosio will follow up and report back to the Council.

Liaison Reports

Smart Grid Interoperability Panel - SGIP

David Forfia has been elected Vice Chair to the SGIP Transactive Energy Coordinating Council.

ISO/IEC

Ron Ambrosio announced that there is a new working group 10A in ISO/IEC JTC1. The working group 10A work focuses on the Internet.

18012 on Lexicon and event coding interoperability was approved. The new work item had to be approved by a majority of countries and also have five countries agree to provide experts to work on it. There is now cooperation with the consumer electronics industry.

Ken Wacks reported on a proposal from Korea to extend standard on energy management and demand response for managing a cluster in apartment buildings.

Farrok Rahimi added that he is leading a panel at the IEEE General meeting that includes Panelist Koen Kok from TNO in the Netherlands will speak on intelligent system support for transactive energy systems.   Koen Kok was a panelist on the International Panel at the 2014 Transactive Energy Conference.

ISO/IEC committee chaired by Ken Wacks is meeting the week of March 16th, 2015, in Tokyo.

SGIP

David Forfia reported that every member of the SGIP is up for election this quarter.   The Board was restructured to 2 directors out of each of 5 "interest groups" and 2 at large for a total of 12. Call for candidates went out Monday, January 19, 2015.

Staffing Update:

- Stuart McCarferty is back as a fulltime employee as VP of Operations and Program Management.

- Gabrielle Puccio was also hired as VP of Public Relations and will be responsible for all internal and external communications including public and media relations.
    - Sharon Allen has transition to her new role as CEO is trying to redefine the identity of the organization. Sharon is trying to bring these into a more

consolidated set for the SGIP brand; connecting with test beds across the industry. Sharon is doing a lot of direct outreach to utilities and major vendors as well as others.   The three areas of focus for 2015:

- Cyber Security
- Members directed Project work
  - Open Field Message Bus Work (first will be that started at Duke)
  - Transactive Energy
  - Cloud computing
  - Microgrid connectivity
  - Consumer systems
- Connection with Test Beds

Consumer Electronic Trade Show

Ken Wacks reported the Consumer Electronic Trade show is largest trade show in the United States with 170k people to see over 3000 exhibits.

AHR Expo

Ken Wacks is one of the 4 people on the transactive energy panel lead by Tracy Markie at the HR Expo in Chicago.

Industrial Internet Consortium

Ron Ambrosio reported that the industrial Internet Consortium is planning to coordinate on smart grid related test beds. Coordinating between IIC and SGIP on test bed proposals that companies can work on it together. There will be an In situ demonstration of new technology.

Gartner

David Forfia reported that there was a great deal of discussion time focused on transactive energy at the last Electric Utility Industry Briefing. David also noted that similar terminology was used, and transactive energy was identified as an emerging area for Gartner Utility Services.

Industrial Internet Consortium

Ron Ambrosio is IBM's Governing Board representative to the Industrial Internet Consortium. The Consortium is looking at different industry solutions use cases, which includes energy related use cases that are being developed in coordination with NIST. Ron is educating this community about GWAC and our work with transactive energy, along with other Consortium founding members General Electric, Cisco, ATT and Intel. The consortium has grown and now consists of 80 members.

Action Items Review

- The Council is to submit past presentations and articles that need to be included in the GWAC communication matrix.
- TE Decision Makers working group to meet in February before the NIST face-to-face meeting.
- Eric Gunther to continue to work on the effort to have the Interoperability Context Setting Framework as an IEEE technical document – Ongoing.
- Doug Houseman and Jason Crabtree to continue work the Transactive Energy Cyber Security paper and plan to meet at Distributech.
- Ron Melton to finalize revision/edits on the Transactive Energy Framework by the end of January.
- Doug Houseman to continue work on the GWAC Mutual Assistance / Emergency Response working group.
- Ron Ambrosio to continue to work on the GWAC Interoperability Context Setting Framework as an ISO/IEC Standard effort
- Schedule monthly Communication Matrix calls.
- Reply to Reji Kumar regarding Smart Grid India Week.

Adjourn

Mark Knight moved to adjourn the meeting, James Mater seconded the motion and the meeting adjourned at 11:48AM.