Meeting Minutes

April 9, 2014

Members

Ward Camp, Landis + Gyr David Forfia, Electric Reliability Council of Texas (ERCOT) Jeff Gooding, California Edison Doug Houseman, EnerNex Mark Knight, CGI Tracy Markie, Engenuity Systems James Mater, QualityLogic Ken Wacks, consultant to Sensus Metering Systems Inc.

Members Not Present

Ron Ambrosio, IBM T.J. Watson Research Center Mark Kerbel, REGEN Energy Inc. Tom Sloan, Kansas State Legislator Heather Sanders, CA-ISO Jeff Taft, PNNL Erich Gunther, EnerNex Corporation David Hardin, EnerNOC, Inc. Paul De Martini, Newport Consulting

> Support – Pacific Northwest National Laboratory (PNNL)

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

Speakers and Guests

Ed Cazalet, TeMix David LeVee, Pwrcast Inc. Larry Lackey, TIBCO Software, Inc. Steve Knapp, Power Generation Services, Inc. Leonard Tillman, Balch, Inc. Dave Wollman, NIST

Members Emeritus

Administrative

Welcome and Administrative Business Ron Melton, GWAC Administrator

Ron Melton called the meeting to order at 10:05 AM.

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

Review of Action Items

Ron Melton, GWAC Administrator

Ron Melton reviewed the following action items from the previous meeting:

- Ron Melton is to continue gathering feedback on the Transactive Energy Framework. The window is closed for input for this revisions cycle but there will be future opportunities for those who would like to provide additional input.
- Ron Ambrosio to seek out a possible Transactive Energy Conference Speaker for HubNet.
- The Council is to create supporting materials for Transactive Energy Roadmap:
 - Summary for Policy Makers (Mark Knight and James Mater)
 Tom Sloan reached out to the Council and requested a document that he could use at the Electrically Advisory Committee to help describe Transactive Energy. A small team of Council members created a one page document titled "Transactive Energy in 1000 Words" for Tom to use at the EAC meeting and also be formed into a formal summary for policy makers. The paper is in the final edit stages.
 - Cyber-Security Implications (Mark Knight and Doug Houseman)
 Doug Housman reported that there is no change from the original. Mark Knight,
 Jason Crabtree, and Doug Houseman will get together to rework the original
 materials provided by Doug Houseman.
 - Infographic (Ron Melton and Jack Eisenhauer)
 A draft infographic was created based on the discussions at the March face-toface meeting at PJM and has been circulated to the Council and the Transactive Energy Working Group for review and comment. This will be an ongoing activity for the Transactive Energy Working Group.
- Create and edit a set of Transactive Energy Principles (Ron Melton, Stephen Knapp, Ken Wacks and Jack Eisenhauer)
 The team assigned to this task has completed a list of the transactive energy principles from the March face-to-face meeting at PJM and Ron Melton has been assigned to consolidate the results of the team's effort.
- Create GWAC Marketing Plan
 An outreach coordination plan is to be developed to focus on GWAC representation at
 future meetings and conferences to discuss transactive energy to the broader
 community.

Approval of Minutes

Ron Melton, GWAC Administrator

The meeting minutes from the February 14 web meeting were distributed to the Council by email for review and feedback. The approval of the minutes was tabled until the May 14, 2014 web meeting due to the quorum not being established.

Calendar Review

Ron Melton reviewed the calendar for the GWAC meetings and the upcoming outreach dates.

GWAC 2014 Web Meetings:

- May 14 -10:00 AM to 12:00 PM
- June 18 10:00 AM to 12:00 PM
- July 23 10:00 AM to 12:00 PM
- August 20 10:00 AM to 12:00 PM

GWAC 2014 Face-to-Face Meetings:

• September 10-11– Hosted by California-ISO in Folsom, California

Below is a list of smart grid-related meetings and conferences prioritized for outreach opportunities and GWAC meeting coordination and scheduling.

05/11/2014 – 05/13/2014	American Council for an Energy Efficient Economy (ACEEE) Energy Efficiency Finance Forum	Washington, DC
05/19/2014 – 05/21/2014	A National Town Meeting on Demand Response info@demandresponsesmartgrid.org	Washington, DC
08/17/2014 – 08/22/2014	American Council for an Energy Efficient Economy (ACEEE) Energy Efficiency Finance Forum	Pacific Grove, CA

Council members and meeting participants discussed other related activities:

- Farrokh Rahimi will be the moderator on a transactive energy panel session that consists of nine panelists at the IEEE Power and Energy Society (PES) T&D meeting April 14-17, 2014 in Chicago. There is a 4-hour time slot to discuss transactive energy.
- The IEEE General Meeting the week of July 27, 2014 will also have several people speaking on various topics, including transactive energy.
- Doug Houseman spoke on transactive energy at the Society of Automotive Engineers (SAE) World Congress in Detroit, Michigan. The focus was on vehicle to grid and Doug spoke on how transactive energy might work in this application and the variations on the grid due to renewable energy and how transactive energy would help ease the variations.
- James Mater asked the council to promote the GWAC Transactive Energy Conference whenever speaking on transactive energy at conferences and workshops.
- Ron Melton will be speaking about the Pacific Northwest Smart Grid Demonstration at the National Town Meeting on Demand Response and will also discuss transactive energy.

Conference and Event Planning

Ron Melton, GWAC Administrator

SGIP Meeting Recap Ron Melton, GWAC Administrator There will be a cross-domain expert working group (DEWG) transactive energy workshop on transaction energy on Thursday, May 8 in Denver Colorado. The workshop is designed to be a high-level cross-DEWG strategy session, and will start with presentations on what transactive energy is, why it is important for smart grid, what has been done so far, and then focus in on the role of SGIP to advance transactive energy and what steps the Smart Grid Interoperability Panel can take to move forward, working together with GridWise Architecture Council.

Ken Wacks suggested that GWAC request a part in the program to publicly formalize the signing of the SGIP/GWAC memorandum of understanding during the SGIP meeting.

Transactive Energy Roadmap Workshop - GWAC Fall Face-to-Face Meeting Planning

Ron Melton, GWAC Administrator

The Transactive Energy Roadmap Workshop and GWAC meeting will be held on September 11-12, 2014 at the California-ISO in Folsom, CA. The workshop will be embedded into the meeting and consist of at least 8 hours and focus on the distribution side of the Transactive Energy Roadmap. Time will also be allotted to finalize assignments for GWAC led panels and presentations at the Transactive Energy Conference in December.

The hotel has been selected and the details and booking information will be emailed out to the Council by April 11, 2014.

Doug Houseman suggested that we invite some of CA-ISO's experts to come and present on the financial, balancing and variable struggles that California is experiencing.

Transactive Energy Conference 2014

Sherry Kowalski provided a status update on the 2nd International Energy Conference which will be held December 10-11, 2014 in Portland Oregon. The venue will be hosted by Portland General Electric at the World Trade Center in Portland, Oregon. A GWAC face-to-face meeting will be held half-day the day prior, on December 9, 2014.

The next planning committee meeting is scheduled for April 27, 2014 and the next program committee meeting is scheduled for April 11, 2014.

A current action item for the conference is to begin to identify possible keynote speakers.

EnergyBiz is to provide a written proposal to assist with conference promotion, sponsorships and procuring attendees.

Technical and Policy

Transactive Energy Infographic

Ron Melton, GWAC Administrator

The Transactive Energy Infographic is a one-page visual representation to help communicate transactive energy with various stakeholder groups. The document was distributed to the Council and Ron Melton asked for feedback as soon as possible.

Transactive Energy Principles

Ron Melton, GWAC Administrator

The Transactive Energy sub-group has been meeting and has developed a set of principles that Ron Melton plans to consolidate the principles and to prepare a document for review prior to the Transactive Energy Working Group meeting on April 23.

Transactive Energy Framework Feedback

Mark Knight, GWAC Chairman

Mark Knight recapped the progress of the Transactive Energy Framework. The Council has received comments and feedback on the Transactive Energy Framework from various sources to rework the draft framework and re-issue an updated version. The most recent set of comments was received from David Holmberg.

Ron Melton will take the lead and accumulate all the comments and make a revision of the document for the Council to review.

Transactive Energy Policy Paper

Transactive Energy Framework Summary for Policy Makers – This will be a three- page summary focused on the broad concepts of transactive energy. Mark Knight and James Mater are leading this project. Mark Knight went through the Transactive Energy Framework and pulled out the descriptive statements from the early chapters and materials that James Mater and Ron Melton provided to create a document titled "Transactive Energy in 1000 Words". The document is in the final edit stage and should be available to be circulated to the Council for comment.

Liaison Reports

Ron Melton GWAC Administrator

- Ken Wacks has an article in the April issue of Appliance Design Magazine titled "The Impact of Transactive Energy on appliances".
- Doug Houseman and Ed Cazalet spoke at The Power Industry Transformation Summit, organized by the Information Forecast Inc. that took place on April 1-3, 2014 in San Francisco. Approximately 170 regulators and energy sector lawyers that were mainly utility-focused gathered to discuss strategic changes transforming the power industry by the penetration of disruptive technologies, unfolding regulatory, technical and business issues that will radically reshape the industry, and emerging working relationships between different industry groups responding to industry changes. Ed Cazalet's presentation focused on TeMix and economics and Doug Houseman's presentation focused on transactive control and the issues the grid is facing that transactive can help solve.

Old Business

• Doug Houseman will provide an update on The Interoperability Context Setting Framework at the next GWAC web meeting.

 Following the PJM meeting, Mark Knight had a discussion with Don Von Dollen regarding him being an EPRI liaison to GWAC and that he will be attending future GWAC meetings.

Action Items Review

- Doug Houseman will provide an update on The Interoperability Context Setting Framework.
- Work will continue on the Transactive Energy Principles, Policy Paper, Infographic, and Framework revision.

Adjourn

Doug Houseman moved to adjourn the meeting, James Mater seconded the motion and the meeting adjourned at 11:31 AM.