# GridWise® Architecture Council

# Meeting Minutes June 26, 2013

#### **Members**

Ron Ambrosio, IBM T.J. Watson Research Center Paul De Martini, Newport Consulting David Forfia, Electric Reliability Council of Texas (ERCOT)
Mark Knight, CGI
Erich Gunther, EnerNex Corporation
Jeff Gooding, California Edison
Tracy Markie, Engenuity
James Mater, Quality Logic
Jeff Taft, Cisco
Ken Wacks, consultant to Sensus Metering
Systems Inc.

#### **Associates**

Doug Houseman, EnerNex

Support – Pacific Northwest National Laboratory (PNNL)

Sherry Kowalski, PNNL Ron Melton, PNNL Andrew Steckley, PNNL

#### Abhishek Somani, PNNL

## **Speakers and Guests**

Naeem Ahsan, KEMA
Anto Budiardjo, Clasma Events
Ed Cazalet
Phil Davis, Schneider Electric
Ken Nichols
Timothy Schoechle
Pam Sporborg
Leonard Tillman
Dave Wollman

#### **Members Emeritus**

Dave Hardin, EnerNOC, Inc.

### *Members* – *not present*

Ward Camp, Landis + Gyr Alex Levinson, Lockheed Martin Tom Sloan, Kansas State Legislator

## **Welcome and Administrative Business**

## Ron Melton, GWAC Administrator

Ron Melton called the meeting to order at 10:00 am.

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

Meeting minutes from the May face-to-face will be approved at the July web meeting.

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

**GWAC Web Meetings:** 

July 17

September 18

#### **GWAC Face-to-Face Meetings:**

- August 27-29 (tentative at Edison Electric Institute, EEI Washington DC)
- October 28-30 (tentative in conjunction with GridWeek)
- December 11-12 (tentative at Southern California Edison)

#### Events:

- October 28 30 GridWeek 2013
- October 20-30 PLMA Conference
- December 9-13 Event TBD

#### TE Web Meetings:

- July 1, 1:00 2:00 PM PT
- July 15, 1:00 2:00 PM PT
- July 29, 1:00 2:00 PM PT
- August 12, 1:00 2:00 PM PT
- August 26, 1:00 2:00 PM PT

## **Review of Action Items**

## Mark Knight, GWAC Chairman

Ron Melton reviewed the action items from previous meetings.

#### **Transactive Energy Conference Track Lead Assignments and Tasks**

- ➤ Erich Gunther, Mark Knight, and Ron Melton to coordinate GWAC face-to-face meeting with GridWeek2013 planning committee. Add GWAC meeting on PointView agenda.
- ➤ Speaker for August 5th "Moeller Summit" in Kansas at the Dole Policy Institute. Tom Sloan has a meeting with FERC Commissioner Moller, the Kansas Public Utility Commission, SPP, MISO, and CEOs of the regional utilities. Tom Sloan asked that a GWAC member frame up a set of discussion topics related to transactive energy. This action will continue to be worked off-line with Ron Ambrosio and Jeff Taft.
- Mark Knight and Paul De Martini to assist locating a DC venue to host the August 27-29 face-to-face meeting.
- Paul De Martini to look into coordinating a GWAC face-to-face meeting at Resnick Research Center in California.
- Ron Melton and Mark Knight to continue work on the formal agreement between SGIP and GWAC.
- ➤ GWAC deliverable to create a 25 page framework document on Transactive Energy to be socialized at GridWeek 2013 October 28-29.
- ➤ Erich Gunther and Doug Houseman continue to facilitate the process of submitting the GWAC Stack as a new IEEE technical report. According to Erich Gunther and Dough Houseman the GWAC stack as an IEEE technical report is proceedings. Currently it is primarily a formatting issue. Ken Wacks will facilitate the introduction of the stack into the ISO/IEC process as desired by GWAC.

### Actions from Joe Hagerman's Discussion:

Create FAQ section on GWAC website

- Identify transactive case studies
- Council to participate in DOE workshops
- Ron Melton and Andrew Nicholls to coordinate on possible EERE family of reports authors
- Voltron briefing for GWAC

## GridWeek 2013

### Mark Knight, GWAC Administrator

Mark Knight will be moderating a GWAC session in the afternoon on Tuesday, August 29 from 1:30-3:00 called "Impacts of Energy Pro-Sumers." The session is focused on transactive energy.

Invited GWAC panelists include:

- Paul De Martini
- ERE
- Tom Sloan
- Jeff Gooding

Jeff Gooding and Paul De Martini to check availability against their calendars and report back to the Council.

The GWAC face-to-face meeting will be held Monday, October 28<sup>th</sup> in the late afternoon.

Will roll-out TE Framework during this session

## **PLMA Conference**

#### Ron Melton, GWAC Administrator

Peak Load Management Alliance (PLMA) is holding their 14<sup>th</sup> fall conference on October 29-30 in Atlanta, Georgia and has invited a GridWise Architecture Council member to speak on transactive energy. James Mater has tentatively agreed to present on transactive energy and Open ADR. James Mater, Ron Melton, and Ken Nichols to continue off-line discussions on presentation planning. Mark Knight sent an abstract out this

## DistribuTech 2014

#### Ron Melton, GWAC Administrator

The Council has submitted an abstract for a 1-1/2 hour panel at the DistribuTech 2014 conference and tradeshow explaining transactive energy.

# **Transactive Energy Conference Recap**

Ron Melton, GWAC Administrator

Ron Melton reported that the fist Transactive Energy conference that was held May 23-24, 2013 in Portland, Oregon was a smashing success. There were 168 registered attendees and 32 sponsors.

The conference results yielded 60 pages of notes taken from the workshops from which a 54 page proceedings were created and posted on the GWAC website at <a href="http://www.gridwiseac.org/pdfs/gwac\_tec\_052313/tec\_2013\_proceedings\_pnnl\_sa\_96361.pdf">http://www.gridwiseac.org/pdfs/gwac\_tec\_052313/tec\_2013\_proceedings\_pnnl\_sa\_96361.pdf</a>

The proceedings include the links to 34 presentation, 34 references, and 9 pages of summations of the sessions.

Survey results indicated that the participants felt that the conference was a definite success and provided a better understanding of transactive energy, the definitions around transactive energy, and the evolution of transactive energy in the future power grid.

# **GWAC August Face-to-Face Planning**

### Ron Melton, GWAC Administrator

The council will be holding a two-day face-to-face meeting and workshop on August 27-28, 2013. Edison Electric Institute (EEI) has been identified as a possible meeting host. The objectives of the meeting/workshop are to:

- work in the final stages of the Transactive Energy Framework core document.
- Develop communication of the Transactive Energy Framework and concepts to DC stakeholder.
- Outreach activities on the third day to continue engagement with the Department of Energy Buildings Technology Office and DC stakeholders.

Ron Melton and Mark Knight will develop an agenda. Below is a list of possible topics:

- Deep review of the Buildings Technology Options report.
- The relevance of TE Framework in today's world. The Council may want to discuss transactive energy in terms of research and commercial activities.
- Houseman would like to report on the IEEE DC and renewable in the home and small buildings.

The DC location will allow the Council interactions with people from DOE, FERC, NRECA, APPA, and other agencies and associations. A block of 30 rooms has been secured at the Marriot Renaissance Hotel on Ninth Street. Booking details will be distributed by Sherry Kowalski next week.

# **GWAC December Face-to-Face Planning**

## Ron Melton, GWAC Administrator

The council will be holding a two-day face-to-face meeting and workshop between the dates of December 4-12, 2013. This meeting will be a way for the Council to engage the community and get further input for development of the framework beyond the core document. The meeting will be co-hosted by CalTech Resnick Institute and Southern California Edison (SCE), the specific location of meeting will be determined on the numbers of attendees expected.

The workshop focus will be transactive energy conceptual use cases. We can plan a meeting next spring that will be technical broad meeting on all the dimensions of transactive energy that would be like GridInterop with more conventional paper tracks around transactive energy.

Paul De Martini suggested that we attempt to keep the participant number at 100-120 and utilize the Southern California Edison Irwindale Energy Education Center as the meeting venue. The two possible meeting dates ate December 4-6 and December 9-12. Paul De Martini and Jeff Gooding will research the venue options and report back by July 10, 2013.

# **Transactive Energy Stack**

## Mark Knight GWAC Chairman

Ken Wacks suggested that the Council creates a transactive energy stack that can be shown on one slide with additional slides as supporting back-up as necessary for presentation material. Jeff Taft recommended that this could be a multidimensional form such as a cube. Ron Ambrosio suggested that we look at how the Europeans combined the GWAC Stack and see how it could relate to transactive energy. Ron Melton suggested that the Council recognize that they would like to have something like this as an outcome and to continue developing the work on the sections we have identified for Transactive Energy Framework document and then revisit the work of developing graphical representations of transactive energy. The council decided to discuss and develop graphical representations of transactive energy. An action was captured to create key diagrams/graphics in conjunction with the work on the core Framework document by the end of summer 2013.

# **Transactive Energy Framework**

#### Ron Melton, GWAC Administrator

Ron Melton reviewed the Transactive Energy schedule. As of mid-June the goal was to have a review and approval on the table-of-contents, chapter outlines, and appendices.

Date	Item
5/22	Agree Table of Contents (based on Interop Framework and Atlanta Workshop)
6/07	Small team to complete introduction including targeted audience and key definitions
6/15	Identify non-GWAC contributors and expert reviewers
6/15	Review & Approval on TOC, Chapter Outlines & Appendices
6/30	** DOE Review & Approve TEF Scope
8/01	Review & Approval on Intermediate Draft
8/15	** DOE Review & Approve Intermediate Draft
9/30	Summarize TEF for GridWeek

10/15	Review & Approval on Final Draft
10/29	Present components of TEF at GridWeek
10/30	** DOE Review & Approve Final Draft
11/15	Final Version Released

Storyboard temples have been created and are located in the subfolder "Storyboards" in the GridWise Architecture Council SharePoint site. Below is a table of the storyboard assignments.

Authors	Section
Ron Melton & Mark Knight	Chapter 1, Preview
Mark Knight & Ken Nichols	Chapter 2, Context Setting
Ron Melton & Mark Knight	Chapter 3, Transactive Energy
Jeff Gooding	Chapter 4, Subsection - Policy Market Design
Paul De Martini	Chapter 4, Subsection - Business Models & Value Realization
Ron Ambrosio & Jeff Taft	Chapter 4, Subsection - TE Architecture
Erich Gunther	Chapter 4, Subsection - Cyber-Physical Infrastructure

Please provide your storybook template to Andrew Steckley as soon as possible. The Pacific Northwest National Laboratory team will draft sections based on storyboards and circulate them to the team leads for review and feedback.

# **Technology Opportunities Report**

Ron Melton has received a draft of Technical Opportunities report that Joe Hagerman and Ken Nichols discussed at the May face-to-face GWAC meeting. Ron will distribute the report immediately following this meeting. There are two sections that Joe Hagerman would like the Council to review and provide feedback:

- Review the "Introduction and DOE Vision" section
  - o Comments due back to Ron Melton by COB July 2<sup>nd</sup>
  - Ron will collate and ask for clarifications
- Review rest of document focus attention on the "Gaps" subsection. Please identify Gaps with a "name" and short description.
  - o Due to Ron Melton by COB July 15<sup>th</sup>.

Ron Melton will organize the information provided and circulate back to entire council and will discuss during July 17<sup>th</sup> GWAC web meeting. Ron Melton will finalize all comments and feedback and submit to Andrew Nicholls by the July 26<sup>th</sup> deadline.

#### **Action Items Review**

- GWAC face-to-face meeting to show on the GridWeek agenda
- Ron Melton will work on identifying GWCA support for the Moller Summit in Kansas.
- Ron Melton will continue identifying GWAC speaker/representation and subject offline for the Peak Load Management Alliance (PLMA) conference
- Ron Melton, Mark Knight and James Mater will begin planning discussions for the 2014
   Transactive Energy Conference. Venue and program details needed by end of this
   summer
- Council members to send Sherry Kowalski possible conference/meeting conflicts that might interfere with the 2014 Transactive Energy Conference
- Mark Knight and Paul De Martini to facilitate August face-to-face meeting venue planning with Edison Electric Institute (EEI)
- Sherry Kowalski to distribute August meeting room block information when it becomes available
- Ron Melton and Mark Knight to develop August meeting agenda
- December Meeting planning actions
  - Jeff Gooding and Paul De Martini to check on availably for rooms on the dates and report back to Council in two-weeks
  - December 9-10
  - December 11-12
  - December 4-5
  - o Council members to hold December 4-12 on calendars
- GWAC Stack Council to continue the work on the Transactive Energy Framework document and further discuss the creation of key diagrams/graphics. Action done by the end of the summer
- TE Framework
  - Story board templates due back to Andrew Steckley as soon as possible
  - o Andrew Steckley to re-distribute the storybook template assignments
- Tech Opportunity Report
  - Ron Melton to distribute DOE Technology Opportunity report for council feedback and review. Comments needed by Council by July 15<sup>th.</sup> Report and feedback to be discussed at July GWAC web meeting

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Ron Ambrosio motioned to adjourn the meeting, Jeff Gooding seconded the motion. Meeting adjourned at 11:57 am.