

Meeting Minutes

June 1-2, 2010

Members

Ron Ambrosio, IBM T.J. Watson Research Center
Robert Burke, ISO New England
Erich Gunther, EnerNex Corporation
David Hardin, Invensys Process Systems
Alex Levinson, Lockheed Martin
Tracy Markie, Engenuity
Robert Saint, NRECA
Ken Wacks, Consultant to Sensus Metering Systems Inc.
Richard Schomberg, EDF
Tom Sloan, Kansas State Representative
Amr Ibrahim, Ohio Consumer Council
Wayne Longcore, Consumers Energy
Rik Drummond, Drummond Group

Support - PNNL

Ron Melton, GWAC Administrator
Ron Jarnagin
Natasha Brock

Speakers and Guests

Steve Widergren, PNNL
Jerry FitzPatrick, NIST
James Mater, QualityLogic, Inc
Mark Knight, KEMA
Anto Budiardjo, Clasma Events
Chris Irwin, US DOE
Matt Futch, CO Governor's Energy Office
Bill Cloutier, DTE Energy Company
Dan Lubar, RelayServices
Tim Schoechle, International Center for Standards Research
Gary Stuebing, Duke Energy
Shawn Catoe, ERCOT –ISO/RTO
Tim Brown, University of Colorado
Steven Hauser, NREL
Glen Andersen, National Conference of State Legislatures Energy Program

Members Emeritus

Wade Troxell, Colorado State University

Proprietary Information Notice

The members and guests were reminded of the proprietary information disclosure policy according to the Bylaws.

Agenda Review

No items added to the agenda at the time of review.

Administrative Business

Meeting minutes from the previous meeting (April 15, 2010) were approved by unanimous vote of the present council members.

GWAC members reviewed a list of upcoming events and GWAC meeting schedule. Ron Melton announced that GWAC will be present during BnP DEWG meeting on July 17, 2010 in Sacramento preceding SGIP and NARUC meeting.

- July 17, 2010: BnP DWEG meeting, Sacramento, CA
- August 18: web meeting
- September 21-23, 2010: GridWise® Global Forum, Washington, D.C.
- October 18-21, 2010: GridWeek, Washington, D.C.
- October 27: web meeting
- November: possible GI 2010 planning meeting
- December 1-3, 2010: Grid-Interop 2010, Chicago

Introductory presentations by newly elected GWAC members

Newly elected council members spoke about their past experiences and current involvement in the industry and the outcomes/results they are looking for after joining GWAC.

Creating Colorado's Smart Grid Deployment Road Map: Moving strategically in the Wild West

Matt Futch, Utilities Program Manager, Governor's Energy Office

Matt Futch in his presentation gave an overview of the Colorado Smart Grid project, smart grid planning and implementation activities, and CO Senate Bill 180, which established an 11 member Task Force. The Task Force will produce a report containing recommendations and analysis on the feasibility, costs, and timing of transitioning to a secure, resilient, and technologically advanced electric grid. 2011 Colorado Smart Grid plan is due to CO General Assembly and Public Utilities Commission by January 20, 2011.

Decision Makers Check List Update Discussion

Ron Melton, PhD, GWAC Administrator

Discussion took place about importance of understanding what regulatory and policy community needs and how GWAC can help close the gap between massive technology activities, standards development and the policy and regulatory communities. It was noted that the legislators and governors like model legislation and/or best practices but terms like “smart grid” or “interoperability” do not have a shared meaning. Ron Melton mentioned that Interoperability 101 session could be developed into an educational web conference.

Ron Ambrosio emphasized the importance to “clearly define and communicate the GWAC’s current objectives and strategy for driving the attention and community engagement on the upper levels of GWAC Stack.”

Action:

Identify and suggest best practices in interoperability policy on smart grids.

Smart Grid Interoperability Maturity Model (SG IMM) Discussion

Steve Widergren, Principal Engineer, PNNL

Steve Widergren described SG IMM current objectives, approach, strategic requirements and structure, and emphasized that goals are the key in IMM development. Mr. Widergren suggested using ARRA funded projects, such as PNW Demonstration, as potential trails for the beta SG IMM. Currently, Grid-Interop 2011 is targeted for presenting the outcomes of this work. During the discussion, the Council agreed that there is a need to create a guide regarding the use of the tool and areas where it would be appropriate to apply this methodology.

GWAC Constitution Re-socializing Status Update

Council members continued the discussion of re-socializing the GWAC Interoperability Constitution among the recently formed smart grid community. This effort started with the intention to use a constitution update as a way of expanding on the principles related to business, policy and regulatory issues, ultimately using it as a tool to start a dialog with the regulatory community.

Ron Ambrosio emphasized that there is no need to rewrite the Constitution but re-socialize the entire document and expand it in the regulatory areas where it is weak based on the feedback received during interviews. It might be necessary to rename the “Policy” section or create an additional one – “Regulatory”. Full Council participation will be needed with engagement of emeritus members targeting five to seven interviews each. Based on conversations with HQ DOE, Dr. Melton stated that it would be important for GWAC to engage the SGIP Governing Board, and they should be the first ones to participate in these interviews. The Council agreed.

It was confirmed to conclude this process at Grid-Interop 2010.

Actions:

Set up a full schedule based on rolling out an updates in one of the plenary sessions.
Update the interview form by BnP and NARUC meeting – come up with new principles
Establish list of interviewees and make assignments
Conduct interviews engaging NARUC, FERC, SGIP GB.

New Topic- GridWise Alliance (GWA) Update

Ron Ambrosio, Chairman

Ron Ambrosio asked the Council to review and provide comments on the document “GridWise Alliance Interoperability and Cyber security Principles.” Council provided comments on the interoperability section since the Council is not focusing on cyber security.

Robert Burke offered a motion to endorse GridWise Global Forum and GridWeek equally.
Motion passed.

Short discussion took place about a request by GWA to host a roundtable discussion on Smart Grid Standards. Council agreed that this topic is more appropriate for SGIP GB and they would rather host a roundtable on Business and Policy Interoperability issues. Ron Ambrosio will coordinate with GWA.

Interoperability principles for business and policy decision makers. University of Colorado - RASEI - "Renewable and Sustainable Energy Institute" and other related initiatives

Timothy D. Schoechle, PhD

Dr. Schoechle spoke about the Renewable and Sustainable Energy Institute- an interdisciplinary joint research effort between University of Colorado in Boulder and National Renewable Energy Laboratory, which is focusing on interdisciplinary energy research, training the next generation of energy professionals, development of market-ready leading edge technologies trying to advance solutions for producing energy economically from low carbon sources, decreasing reliance of foreign oil and using energy more efficiently.

SmartGrid Manifesto

Wayne Longcore

Wayne Longcore presented his vision for the Smart Grid Manifesto, document representing a high level, horizon declaration of direction; idea first introduced to GWAC during April 15, 2010 meeting.

The Council agreed that industry needs a clear vision. Draft text was presented; Steve Widergren commented and Ron Melton agreed that the GridWise Alliance Declaration (<http://gridwise.pnl.gov>) might be a good starting point to establish the context with what Mr. Longcore brought up to understand how it links with other things that comes before it.

Chris Irwin said that GWAC has “the least amount of bias and most experience” to draft this and then the document could be worked across the inter-agency landscape.

Dr. Melton summarized that such a statement of what the transformed power system would be like in X years from now would be important in order to ensure “today we design in ways that are flexible and adaptable and allow for an evolution because it is going to be an evolutionary process.”

ISO/RTO Council

Shawn Catoe

Shaw Catoe, gave an overview of the ISO/RTO Council (IRC), which is comprised of ten Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) in North America and briefly spoke about seven committees that work to further the IRC's goals and purposes and smart grid activities, - PEV Study, SGIP PAP09 – Demand Response and PAP07 – Energy Storage. In March 2010, a study on PEVs was released which examined the technical hurdles and tools needed to foster the benefits of widespread PEV use. IRC PAP09 Demand Response project was completed in May 2010 in conjunction with KEMA & UISOL identifying common business process & information requirements for the Smart Grid resources in ISOs and RTOs.

For more information about IRC and its publications visit <http://www.isorto.org/>.

DOE Update

Christopher Irwin, Office of Electricity, U.S. Department of Energy

Mr. Irwin in his presentation gave an overview of the distribution of funds that were made available by The American Recovery and Reinvestment Act and current programs that are “intended to jumpstart the smart grid, transform electricity delivery, and provide a current state of interoperability.”

Mr. Irwin reported that smart grid is a hot topic in Washington: policy, science and implications being the focus. Many agencies are involved, but from DOE perspective, not all speak the smart grid language and GWAC still offers the only comprehensive view of the Smart Grid and needs to promote the language it speaks and bring the message out to the stakeholders by not a single presentation but by establishing a comprehensive train the trainer programs. Chris Irwin commented, “The Council’s statements and vision from six years ago are still valid - impressive.”

Digital Energy graduate program at the University of Colorado

Tim Brown, Director Interdisciplinary Telecommunications Program Department of Electrical, Computer, and Energy Engineering, University of Colorado

Professor Tim Brown spoke about a new program being introduced in the fall of 2010 as part of Electrical, Computer, and Energy Engineering Department at the University of Colorado- a graduate engineering program with a focus on networking, wireless communications, and cyber security within electric power system, bestowing a Master of Science in interdisciplinary communications. Mr. Brown highlighted the needs for such specialists in the current market and looking into the future as smart grid technology evolves and the benefits of completing this degree at CU.

ConnectivityWeek - Take aways

Ron Melton, GWAC Administrator

Most of the council members were present at ConnectivityWeek that took place May 23-27, 2010 in Santa Clara, CA and their collective feedback was that too many activities were taking place at the same time. For example, SGIP working meetings conflicted with other sessions. Anto Budiardjo, president of Clasma Events, commented that the way to address this issue would be to make smaller tracks, make information available on line, and to assist session leaders in organizing the content.

James Mater said that it would make sense to keep these observations in mind while planning Grid-Interop 2010.

Interoperability 101 at GridWise Expo

Ron Ambrosio, GWAC Chairman

Council members provided their feedback on the first cut of the Interoperability 101 Session - “Applying Interoperability in Smart Grid Projects” that contained four presentations: “What is

interoperability and why do we care about it?"; "Interoperability concerns for business and policy"; "Technical interoperability"; and "Interoperability conformance testing."

The summary of the comments included: leaving the lower parts of GWAC Stack out and excluding IMM, possibly conformance, (it should be a separate session), too much information was covered; and not enough focused on "why interoperability is important."

Bob Saint will lead this effort and Council will continue work based on the comments provided and it will be presented in a workshop format during GridWeek event.

Grid-Interop 2010

Ron Jarnagin, GWAC Administration

Ron Jarnagin gave a quick update on the current planning activities. The status is as follows: abstracts will be reviewed and organized into sessions during face to face meeting on June 3-4, 2010. The Planning committee will be discussing plenary speakers and defining the Foundational session.

Council members reviewed possible topics for the foundational session, which is seen as a great opportunity to set the tone of the event and position the activities on the upper level of GWAC Stack. Dr. Melton summarized that the conversation should be driven by the importance of interoperable solutions with real-world examples.

Actions:

- Start identifying keynote speakers

NIST Report

SGIP collaboration: issues and actions update

Jerry Fitzpatrick, NIST

Jerry FitzPatrick provided a brief summary of the SGIP activities. NIST has joined with the GridWise Architecture Council (GWAC) to form Domain Expert Working Groups (DEWGs) to explore smart grid interoperability issues. Currently, according to a new Charter; DEWGs are under SGIP with a single chair. Besides performing analysis of interoperability standards and gap identification, DEWGs will be focusing on strategic issues relevant to standards development and the Council's input is requested.

In order to define a path forward, possible agenda items were discussed for the upcoming BnP DEWG meeting on July 17, 2010 in Sacramento in conjunction with NARUC meeting.

Summary of the Action Items

Action Item	Assigned To	Due Date
<p><u>Constitution update:</u></p> <ul style="list-style-type: none"> – Set up a full schedule based on rolling out of updates at Grid-Interop 2010 event. – Update the interview form by BnP and NARUC meeting – Conduct training webinar for the interviewers – Establish list of interviewees – Conduct interviews engaging NARUC, FERC, SGIP GB – Summarize feedback and finalize revisions – Report at Grid-Interop 2010 	<p>Ron Jarnagin GWAC Administration GWAC</p>	<p>July 2010</p> <p>July 2010 08-09, 2010 09, 2010 08-11, 2010</p> <p>November 2010 December 2010</p>
<p><u>Check list Update</u></p> <ul style="list-style-type: none"> – Update the Checklist based on the suggestions in James Mater’s 2009 paper – Identify and suggest best practices in interoperability policy on smart grids. 	<p>Working group/ GWAC Administration</p>	<p>September 2010</p> <p>December 2010</p>
<p><u>Coordinate publications of the technical papers submitted to Grid-Interop 2009.</u></p>	<p>Ron Jarnagin Dave Hardin</p>	<p>April 2010</p>
<p><u>Develop “Interoperability 101” session</u></p>	<p>GWAC members/ GWAC Administration</p>	<p>September 2010</p>
<p><u>IMM</u></p> <ul style="list-style-type: none"> – Develop Beta IMM 	<p>IMM team</p>	<p>September 2010</p>