

## Meeting Minutes October 21, 2011

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### *Members*

Ron Ambrosio, IBM T.J. Watson Research Center  
Rik Drummond, Drummond Group  
Alex Levinson, Lockheed Martin  
Bob Saint, NRECA  
Ken Wacks, consultant to Sensus Metering Systems Inc.  
Erich Gunther, EnerNex Corporation  
Tracy Markie, Engenuity  
Wayne Longcore, Consumers Energy  
Robert Burke, ISO New England

### *Support – Pacific Northwest National Laboratory (PNNL)*

Ron Melton, GWAC Administrator  
Todd Halter, PNNL  
Sherry Kowalski, PNNL  
Steve Widergren, PNNL

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### *Speakers and Guests*

John Simmins, EPRI  
Gerald Fitzpatrick, NIST  
Leonard Tillman, Balch & Bingham LLP  
Dave Wollman, NIST

### *Members – not present*

Tom Sloan, Kansas State Legislator  
Ward Camp, Landis + Gyr  
Amr Ibrahim, Ohio Consumer Council  
Robert Burke, ISO New England

### *Members Emeritus*

Richard Schomberg, EDF  
Dave Cohen, Infotilly

## Proprietary Information Notice

Erich Gunther called the meeting to order at 9:03 a.m.

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

## University Outreach/Curriculum Development Update

### *Ron Melton, PNNL, GWAC Administrator & Bob Saint*

Ron Melton provided an update on the University Outreach Initiative and survey process.

Three of the four components of the current initiative have been completed:

- Outreach Contact Directory:
  - Smart Grid Workforce Training Programs (ARRA funding), University of Minnesota Collaboration partners, Power Systems Engineering Research Center (PSERC), GWAC contacts.
- Academic Landscape Report:

- Detailed report on status of ARRA and associated organizations.
- Survey Design, Distribution:
  - Working with Sherry Kowalski to coordinate distribution.

Sherry and Catherine are currently receiving survey results which will be compiled and evaluated by Catherine Weldon. The results will be analyzed and incorporated into the Academic Landscape Report and made available for discussion at the next GWAC meeting. The next step is to draft the curriculum material.

## Interoperability Constitution Update

*Ron Melton, PNNL, GWAC Administrator*

Ron Melton explained the document clearance process, which includes a peer review in order to make a document public. The peer reviewer for the constitution update was Steve Widergren who provided comments that the Council needs to discuss and consider.

### Regulatory Principles:

Steve's comments were that Principles R3 and R4 were off base because they presume regulators are in charge of the business drives and decisions making. The regulators should be more involved in setting and guarding a competitive environment and reviewing the performance. The Council discussed the comment and possible resolution. The outcome of the discussion was that R3 should remain as originally written.

**R03** - Interoperability approaches must allow regulators to verify the cost-effectiveness of the relevant business transactions where required.

Steve's comment on R4 was that regulators do not provide choices to consumers. Steve suggested a possible rewrite. The Council discussed the comment and concluded to rewrite the R04 as follows:

**R04** - Interoperability must enable consumers to have understandable choices of energy services and simple methods for using these services.

### Use of the term "Utilities"

In the "Context" section of the policy principles is the only place in the Constitution where the word "utilities" is used.

Policies may be developed by regulators, legislators or **utilities** and are established to provide protection for customers while allowing for maximum customer flexibility and choice. Policies should be designed for transparent transactions and processes in the **utility** industry so that products and services develop and flourish while serving the needs of the economy and the nation.

After discussion the follow rewrite was accepted by the Council.

Policies may be developed by regulators, legislators or **energy service providers** and are established to provide protection for customers while allowing for maximum customer flexibility and choice. Policies should be designed for transparent transactions and processes in the **electric power** industry so that products and services develop and flourish while serving the needs of the economy and the nation.

**Policy Principles:**

The comment made on P1 was that choice is defined as a generally applicable attribute behind all principles so we could keep the statements to a low number and not be verbose. P1 doesn't seem to add anything. After council discussion, it was determined to leave the policy principle as written.

**P01** - Interoperability solutions should provide maximum flexibility for consumers, subject to regulatory constraints, while respecting their access, usage, disclosure, and privacy rights for these data.

The comment on P02 was this is a recommendation and not a principle. It comes out in other GWAC documents; such as the Decision-maker's Checklist. After discussion the Council decided on the following rewording.

**P02** - A model set of interoperability policies should be considered by legislators and regulators with adaptation where needed for local and regional conditions.

After discussion the council agreed to the following change to the principle.

**P02** - Development of model set of interoperability policies will facilitate consideration and adoption of specific policies by legislators and regulators with adaptation to the needs of specific jurisdictions.

The comment on P3 was that the principle is unclear. It seems like "policy" should support the information flows, rather than interoperability. Perhaps the principle is that the policy should support information flows between transacting parties and interoperability as an enabler for effective integration of smart grid devices and systems, but principle 03 sounds like a recommendation.

After discussion the council agreed to the following change to the principle.

**P03** - Interoperability policies should support information flows among utilities, customers and third-party suppliers of energy services along a variety of communication pathways subject to security and privacy protections.

The changes will be instituted into the constitution and we will be issuing a version 2.1 before the next GWAC web meeting on November 16, 2011.

## Call for Candidates

**Ron Melton, PNNL, GWAC Administrator**

Ron Melton reviewed the Call for Candidates schedule and the list of members that are expiring. GWAC is seeking a minimum of 20% turnover. The Selection Committee consists of the GWAC Administrator, DOE representative, a GWAC member not up for renewal, and one outsider.

### **The 2012 Selection Committee:**

- Jerry Fitzpatrick - DOE Representative
- Ron Melton - GWAC Administrator
- Chris Irwin - Outsider
- Tracy Markie - Non-renewing GWAC Member

### **GWAC members that are up for review:**

- Erich Gunther
- Ron Ambrosio
- Rik Drummond
- Amr Ibrahim
- Alex Levinson
- Wayne Longcore
- Thomas Sloan
- Kenneth Wacks

Ron Melton requested the GWAC members with expiring terms to please send an email of their membership intent to Ron Melton and Sherry Kowalski.

### **The proposed schedule for the Call for Candidates:**

- Poll members with expiring terms – Ongoing
- Call for candidates – November 15th
- Application period closes – December 15th
- Selection Committee – December 15<sup>th</sup> – 30<sup>th</sup>
- Slate Selected – January 6th
- Slate submitted for confirmation – January 25<sup>th</sup> GWAC Web Meeting

The application period will be open during Grid-Interop to answer questions for potential members.

## GridWise Vision

**Ron Melton, PNNL, GWAC Administrator**

Discussion about Alison’s comments and the common understanding about the smart grid vision took place. Ron shared that the document is about 80% drafted. The Committee is currently focused on writing vignettes to provide more concrete illustration of the vision, overarching, and societal needs.

- Residential consumer
- Business consumer
- Industrial consumer
- Wholesale energy service provider
- Retail service energy

The document is located on the GWAC SharePoint site and is in the folder labeled “smart grid vision”. Ron is hoping to get the vignettes drafted within two weeks.

Ron Melton asked Jerry Fitzpatrick to review the document and provide input prior to the release.

## BnP DEWG (Business and Policy DEWG)

**Ron Melton, PNNL, GWAC Administrator**

Dave Wollman provided a BnP DEWG (Domain Expert Working Group) update to the Council. The goal of the BnP DEWG is to have a fall meeting concurrent with the NARUC members in St. Louis. Most of the efforts have been at a subcommittee level and are progressing nicely. The one issue that has more people personally involved with is the conversation on how to fold implementability and reliability reviews into the SGIP. The DEWG was chartered by the SGIP governing board to initiate this discussion. Mark Claire and Dave Wolman have been organizing the meetings that will draw in the different points of view into consensus.

Erich Gunther and Dave Wollman are going to engage NARUC to create effective liaisons that might be of interest to GWAC. Specifically issues are the BnP DEWG and how to establish work plans moving forward. There is a need to select a few key items to work on next year. DAVE Wollman was planning on using the Grid-Interop BnP DEWG meeting as a mechanism to establish a work plan.

Discussion continued about the challenge to get NARUC to believe there was a useful discussion to be had with GWAC.

Ken Wacks asked inquired about the proposal by Paul Centolella within the BnP DEWG sub-group about broadcasting real time price signals from an RTO or ISO to be received by smart grid appliances. Ron Melton said he has had discussions about such signaling with Paul Centolella during some of the Transactive Energy webinars. Paul Centolella understands that it is an imperfect approach but believes we need to get it started. How do you get a critical mass installed functionality when you do not have signals for smart appliance to receive? This is the challenge that Paul is trying to overcome.

Ron Melton asked Dave Wollman if he can call in to the November 16 web meeting and provide a BnP Dewg update.

## Lunch Speaker – Use of GWAC Stack by EPRI in the CIM Project

### *John Simmons, EPRI*

John Simmons provided a presentation on how the Electric Power Research Institute is using the IntelliGrid Methodology and the GWAC Stack in its smart grid project management.

The GWAC stack is being used to close the gap of smart grid project management to produce long-term success. Some issues faced in project management are the lack of a conceptual model of a smart grid project and the lack of methodology for scoping and managing a project. More specifically:

- Need to envision the entire project to scope it properly.
- If it affects the success of the project, it needs to be planned.
- Need to ensure that the entire scope has been planned.

John Simmins explained how the GWAC Stack is used as tool and technique for defining project scope. The GWAC Stack is clearly seen and addressed in the project plan.

## Interoperability Maturity Model Update

### *Steve Widergren, PNNL*

Introduced the Smart Grid Interoperability Model team:

- Stephan Amsbary, EnerNex
- Rik Drummond, Drummond Group
- Tony Giroti, Bridge Energy Group
- Doug Houseman, EnerNex
- Mark Knight, KEMA
- Alex Levinson, Lockheed Martin
- Wayne Longcore, SAP
- Randy Lowe, American Electric Power Service Corp
- James Mater, QualityLogic
- Austin Montgomery, CMU SEI
- Terry Oliver, BPA
- Phil Slack, Florida Power & Light
- Andreas Tolk, Old Dominion University
- Steve Widergren, Pacific Northwest National Laboratory

Team members present at the GWAC face-to-face meeting are Tony Giroty, Alex Levinson, and Rik Drummond.

Steve Widergren provided an overview of the smart grid Interoperability maturity model and its purpose. IMM is all about what we can do to help access interoperability for the smart grid ecosystem. IMM is tool for measuring the process of interoperability, a road map for improved a tool that is both descriptive and prescriptive.

The progress made on the IMM to date:

- Reviewed & refined Interoperability area goal statements

- Drafted maturity statements
- Refined maturity and metric statements
- Drafted beta document outline
- Assignments for distilling metric statements to simplify model

Smart grid IMM beta document was presented and reviewed by the Council. Alex Levinson will review the statements and choose some examples to include in the data document. The beta document is by November 18, 2011.

The SG IMM will be presented at the Grid-Interop foundation session in December, 2011.

Steve Widergren stated that work will continue on the SG IMM and future tasks include:

- Prepare beta SG IMM document
- SG IMM beta trial
  - ARRA SG Demo: PNW SG Demo
  - WECC
- Beta SG IMM review period and socialization
  - Grid-Interop 2011 foundation session
  - 2012 Workshop & trials
- Derivative work item planning required
  - Target specific audiences
  - Check lists and other tools

Dates are being considered for a future workshop.

## **Review of Action Items**

***Ron Melton, PNNL, GWAC Administrator***

- Council Members to review goal documents on website and SharePoint site for directional review.
- Ron Melton to approach Eric Lightner about GWAC's involvement in the Smart Grid Task Force.
- Council members to review the latest GWAC presentation, GridWise Architecture Council Overview and Perspectives – v1.0 created by Ron Ambrosio.  
<http://www.gridarch.org/outreach/Shared%20Documents/GridWise%20Architecture%20Council%20-%20Overview%20and%20Perspectives%20-%20v1.0%20-%202010-10-26.ppt>
- Continue work on GWAC Vision document.

Due to Erich Gunther's departure the meeting was turned over to Ron Ambrosio to continue discussions.

Ken Wacks discussed MIT research projects:

Reconfiguration and distribution to get the most out of a grid for charging electric vehicles. Ron Melton shared that PNNL did a similar study. If you implement smart charging the power grid could handle a 70% penetration of electric vehicles.

Another project is frequency regulation of generators.

Natural Gas Industry – Gas Technology Institute receives funding from various gas companies to do research on natural gas issues. What is the effect of distributed energy resources on gas consumption by gas-fired generators? Gas firing peaking plants might need inrushes of gas to fill the demand. Ron suggested this might be an interesting topic for a plenary speaker to discuss the connection between the smart grid and the natural gas industry.

## **Adjourn**

Bob Saint motioned to adjourn, Tracy Markie seconded the motion. The meeting adjourned at 2:10 p.m.