

## Meeting Minutes January 28-29, 2010

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Chairman Ron Ambrosio led the meeting that was held at 8:30 a.m. – 4:30 p.m. on Thursday, January 28, 2010 and 8 a.m. – 2:15p.m. on Friday, January 29, 2010, in Orlando, FL.

### *Members*

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Ron Ambrosio, IBM T.J. Watson Research Center  
Nora Mead Brownell, ESPY Energy Solutions  
Robert Burke, ISO New England  
Rik Drummond, Drummond Group  
Erich Gunther, EnerNex Corporation  
Stephanie Hamilton, EPRI  
David Hardin, Invensys Process Systems  
Alex Levinson, Lockheed Martin  
Tracy Markie, Engenuity  
Robert Saint, NRECA  
Ken Wacks, supported by GridPlex  
Lynne Kiesling, Northwestern University (by phone)  
Richard Schomberg, EDF (by phone)

### *Support - PNNL*

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Ron Melton, GWAC Administrator  
Ron Jarnagin  
Natasha Brock

### *Speakers and Guests*

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Steve Widergren, PNNL  
Jerry FitzPatrick, NIST (by phone)  
Joe Hughes, EPRI  
James Mater, QualityLogic  
Toni Giroti, BRIDGE Energy Group Inc.  
Terry Oliver, Bonneville Power Administration

Phil Slack, Florida Power & Light  
David Bates, Florida Power & Light  
Dean Prochaska, NIST  
Brian Lenane, SRA International  
Toby Considine, TC9, Inc  
Don Collins, Western Research Institute  
Bill Cox, SoftwareArchitects  
Shawn Murray, Microsoft Corporation  
James Mater, QualityLogic, Inc  
Charles Smith, GE Appliances  
Mark Knight, KEMA  
Terry Sick, EnerNOC, Inc  
Jacob Thompson, EnerNOC, Inc  
Mark Lauby, NERC  
Katherine Hamilton, GridWise Alliance  
Adam Berry, General Catalyst  
Anto Budiardjo, Clasma Events  
Ralph Martinez, (by phone)  
Randy Lowe, AEP (by phone)  
Laurent Luscia, Oasis (by phone)  
Becca Dietrich, GridWise Alliance (by phone)  
Chris Irwin, US DOE (by phone)  
David Wollman, NIST (by phone)  
Ed Dobrowolski, NERC (by phone)

### *Members Emeritus*

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Jack Mc Gowan, Energy Control Inc.

## **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 GWAC web meeting that took place on December 11, 2009, were approved by unanimous vote of the present council members after incorporation of Mr. Schomberg's comments.

### **Upcoming events review and GWAC meeting schedule.**

- February/March 2010 – web meeting
- Potential face to face meeting week of April 12 - in Northeast at IBM Watson or IBM NYC or in Boston
- May 24-27, 2010 - ConnectivityWeek/GridWise Expo, Santa Clara
- August - potential face to face meeting (and GI10 planning meeting)
- September 21-23, 2010 - GridWise® Global Forum, Washington, D.C.
- October - potential face to face meeting co-located with GridWeek
- October 18-21, 2010 - GridWeek, Washington, D.C.
- December 1-3, 2010 - Grid-Interop, Chicago

Short discussion took place of the two events: existing GridWeek and a new event GridWise® Forum that is being organized by GridWise® Alliance. It has been noted that GridWeek moves towards the trade show and GridWise® Forum goes for the original goal of trying to reach out to the policy makers and senior technical staff. Ron Ambrosio noted that Council members need to discuss this further in order to determine which meeting offers most opportunity to impact the community and which audience needs to be engaged in the face to face discussions.

#### **Actions:**

- Schedule the phone meeting in March, 2010
- Determine the location for the meeting in April, 2010.
- Secure dates for the GWAC meetings through the end of 2010.

## **2010 Call for Candidates**

The Nominations Committee has reviewed the applications for the new members and the current members who wished to remain on the council. As a result, the following slate of candidates was confirmed: Ron Ambrosio, Rik Drummond, Erich Gunther, Alex Levinson, Ken Wacks and two new members Wayne Longcore and Thomas Sloan joined the council. Nora Brownell spoke about Representative Sloan's dedication and effort he puts in everything he tries

to accomplish. Dave Hardin, one of the members of the Nominations Committee in 2010, noted that it has been a difficult process of making a selection due to the submissions of many very talented experts. Alex Levinson moved the motion to approve the slate and Richard Schomberg seconded. Slate was approved unanimously.

Nora Brownell, Lynne Kiesling and Stephanie Hamilton will move to the emeritus status. The committee found no applicants with an economics background who would be suitable replacements for Ms. Kiesling. After targeted solicitation, several potential candidates were identified. Ms. Kiesling has agreed to remain active while the suitable replacement is found. The process is expected to be concluded in mid February, 2010 with the teleconference vote.

Actions:

- Schedule the web meeting for the Nominations Committee
- Complete the voting process

## **Outreach & Liaison Update**

### **On-going liaisons**

#### *GridWise Alliance – Ron Ambrosio*

Ron Ambrosio described four working groups within GridWise Alliance: Interoperability and Cyber Security (ICWG), which Ron Ambrosio chairs with Sharla Artz, Schweitzer Engineering Laboratories. Cyber Security and Interoperability survey was completed last year but not enough response was received in order to make it a valuable data. Some information collected, although, could be beneficial for the Interoperability Maturity Model (IMM).

The other three groups are: Federal Policy, State Policy, and Implementation Working group. Ron Ambrosio could obtain the status on the latest activity if needed.

#### *IEC Smart Grid strategic group (SG3)– – Richard Schomberg*

The IEC Smart Grid Strategic Group has been created at the Sao Paulo meeting in November of 2009, and Richard Schomberg has been appointed to lead the group composed of 13 National Committees. An IEC Smart Grid portal has been put in place as a one stop shop for Smart Grid standards for project managers.

A major decision meeting is scheduled for February 9, 2010. The top down management approach in the IEC system will be addressed, and it is very critical for smart grid. It will be a revolution in the IEC were the standards have been mostly incepted through bottom up processes.

#### *ISO/IEC JTC 1 – Ron Ambrosio*

The new Special Working Group (SWG) on Smart Grid is being created. Call for Participation went out after the JTC 1 Plenary in Tel Aviv in September 2009 during which Ron Ambrosio was named and approved as Convenor. A number of countries have forwarded contacts. Chairman Ambrosio will be reaching out to the additional countries that he thinks should be involved. SWG is a group similar to the IEC/STG 3 and is a non-standard making body where a lot of technical and electrical engineering information come together looking at the activities relevant to the smart grid and identifying gaps. First telecom will be announced in two months from now.

ISO/IEC JTC 1 SC 25/WG 1 – Ken Wacks

This group is responsible for standards in the field of home and building systems including energy management. Request was received from the Standard's Management Board of JTC 1 to upgrade a ten years old work on application model for energy management that was published as a technical report to a standard. It has been revised and sent out for comments to the national bodies. The focus of the model is on the interface between home and network to the service providers. WG 1 meeting is scheduled for April 26, 2010 hosted by IBM in NY. Twenty five delegates are expected from North America, Europe and Asia.

**Outreach Reports**

Consumer Electronics Show (CES) /Home-to-Grid Summit– Ken Wacks

CES took place in Las Vegas, NV and is the largest trade show in the US. This year about 120,000 people attended the show, an increase of 10,000 from last year.

The focus appeared to be on the TV newer technologies: 3D television, television with access to the internet. The executive summit provides an open forum for executives from government, utilities, and the consumer electronics (CE) industry to discuss the impact of smart grid on CE products. CEA announced the initiation of a smart grid effort.

Ken Wacks, Richard Schomberg, and George Arnold spoke at the Home-to-Grid Summit during the Consumer Electronics Show on January 9, 2010. The event drew only about 50-60 attendees, but Ken felt it was a very successful event.

Smart Energy Summit, Austin, TX– Ken Wacks

This event took place on January 25-27, 2010 and brought together 150 attendees. The focus was on the roadmap for the emerging market in-home energy management technology, offering consumer and industry research and strategic insight.

Richard said the Best Buy's announcement that their Geek Squad will do energy audits has really caught his eye. Richard also commented that many/most booths featured energy-related messages, and he doesn't think this is a good situation since there may be a perception that energy management is being completely covered, which is far from the truth.

Ron Ambrosio commented that a lot of new information should be available in the next year as the consumer products' vendors are trying to understand what is going to spark consumers' attention. Depending on what succeeds and what fails in the next year, we can quickly learn what consumers care about, and how it translates into the value proposition of the smart grid.

Ron Melton suggested co-locating the GWAC meeting with next year's CES. There is an IEEE international consumer electronics event immediately after the CES. Anto Budiardjo, CEO of Clasma Events reported that planning 2011 H2G Summit has started.

Actions:

- Decide if GWAC will hold a meeting before or after the CES in January of 2011.

Korea Smart Grid Forum - Schomberg

Mr. Schomberg spoke about a new annual event, Korea Smart Grid Forum, which he attended representing IEC. He was very impressed by the organization of the Korean industry: Korean Smart Grid alliances to support their ecosystem and a Smart Grid Institute had been created, and they have direct and strong government support and involvement.

The event was very well designed. Mr. Schomberg made two presentations: on interoperability and explaining GWAC Stack with the executives of the Korean companies being present.

#### AHR Expo® - Markie

Over 1,800 manufacturers and suppliers of the latest HVAC&R systems, equipment, products and services were present at the 2010 show. Hundreds of exhibitors were featuring energy-efficient solutions and a variety of educational sessions were built around these interests.

GWAC hosted two sessions. On Monday, about 80 attendees participated in “Smart grid and industry” session which was chaired by Bill Cox, Tracy Markie, GWAC member, and GWAC member emeritus Jack McGowan. During Tuesday’s session two topics were presented: Smart Grid in-general and how projects implemented under the American Reinvestment and Recovery Act will impact the industry and establish trends for decades to come.

### **Integration Roadmap for Smart Grid: From Accidental Architecture to Smart Grid Architecture**

*Toni Giroti, Managing Director, BRIDGE Energy Group*

Toni Giroti discussed interoperability and integration challenges and the approach that BRIDGE Energy Group has taken to address the complex integration problems the industry is facing as it rolls out AMI/AMR, DR, and other Smart Grid programs. “An Integration Roadmap for Smart Grid - From Accidental Architecture to Smart Grid Architecture” paper was introduced at the Grid-Interop 2009 event in Denver, CO and presents this approach in more details mapping these challenges directly to the interoperability issues outlined by the GWAC in its context-setting framework.

In response to Richard Schomberg’s question if this methodology has been used on an actual project, and how many times, and if there were any good experiences that can be cited already, Toni said that they are providing real value to the customers already.

### **Microsoft's Strategy for Cloud Computing (with a Utility Point of View)**

*Shawn Murray, Americas Sales Director, Windows Azure Platform, Microsoft Corporation*

As the Americas Sales Director of Cloud Computing for Microsoft Corporation, Mr. Murray is responsible for executing Microsoft’s Software “Plus” Services strategy that includes creating new applications for the cloud using Microsoft’s development platform called Windows Azure. Cloud platform services or “Platform as a Service (PaaS)” deliver a computing platform and/or solution stack as a service, often consuming cloud infrastructure and sustaining cloud applications. It facilitates deployment of applications without the cost and complexity of buying and managing the underlying hardware and software layers.

Mr. Murray described Microsoft’s commitment to the Utilities industry in providing the solutions to meet consumers’ needs focusing on the three issues: reducing costs, adhering to the government policies and meeting growing demands.

“Microsoft's cloud strategy is visionary, and its ambitions are broad and span multiple dimensions including on-premises and off-premises deployments and a variety of business models. No other vendor is attempting to deal with the cloud in all these dimensions simultaneously,” - he quoted “Who's Who in Application Platforms for Cloud Computing: The Enterprise Generalists”, September 16, 2009 .

## **DOE Update DOE Update and Perspectives: SGIG, Smart Grid Demos, and SGIP**

*Chris Irwin, Smart Grid Standards and Interoperability Coordinator, US DOE*

Mr. Irwin talked about the importance of the Smart Grid Investments Grants (SGIG) in support of the implementation of the Smart Grid programs authorized by the Energy Independence and Security Act of 2007, which included the Smart Grid technology research and development, and the demonstration projects and a role of the Office of Electricity Delivery and Energy Reliability in leading national efforts to modernize the electric grid; enhance security and reliability of the energy infrastructure; and facilitate recovery from disruptions to energy supply, as well as providing an effective structure for collaboration and resolution of conflicts.

Mr. Irwin highlighted the Advanced Security Acceleration Project - Smart Grid (ASAP-SG) effort and its importance in accelerating security standards development for Smart Grid as well as cyber security activities for Smart Grid that are critical to Smart Grid success. Notice of Intent was issued for “National Energy Sector Cyber Organization”, which is envisioned as a partnership between the federal government and energy sector stakeholders to protect the bulk power electric grid and aid the integration of smart grid technology to enhance the security of the grid.

## **NIST Report**

*Dean Prochaska, National Coordinator for Smart Grid Conformance, NIST*

Mr. Prochaska spoke about the NIST's initial steps over the last year in “... coordinating development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems...” under Energy Independence and Security Act (EISA) of 2007, achievements and current priorities.

Mr. Prochaska highlighted the importance of the Smart Grid Interoperability Panel (SGIP) that was launched in November 2009 at Grid-Interop forum. SGIP, public-private partnership with 500 member organizations and over 1,400 individual representatives including 33 international companies/organizations from 12 different countries in South and North America, Europe and Asia, supports NIST in setting standards for U.S. smart grid: coordination, acceleration and harmonization of standards while building a secure and interoperable smart electric grid.

Developments toward Smart Grid Interoperability:

- Second DRAFT NIST IR 7628 Smart Grid Cyber Security Strategy and Requirements to be posted in February 2010 for a 60-day comment period
- NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 1.0

## Energy Smart Florida

*Phil Slack, Chief Technologist & Senior Group Manager, Enterprise Architecture, Florida Power & Light*

Phil Slack gave an overview of the Florida Power & Light Company (FPL), its service territory and contributions to the Florida's economy. FPL's Smart Grid Vision was developed initially about 4-5 years ago and maps well to the GWAC Stack. Energy Smart Florida (ESF) leverages world class partners to deliver the Smart Grid promise - the "Energy Internet" and is:

- a \$578M investment to build a cleaner, smarter and more efficient power infrastructure
- delivers a predictive, end-to-end business view that enables FPL to improve grid performance, drive efficiencies and enable new customer services
- enables customers to better understand and manage their energy consumption, and its impact on the climate

Mr. Slack emphasized the importance of the close cooperation between customers, utilities, regulators and vendors for the success of ESF and other U.S. Smart Grid initiatives.

## Meeting Future Energy Needs in Florida and the United States

*Presentation by David Bates, Manager, Development – Renewable Energy, Florida Power & Light*

Committed to provide clean energy for future generations, a national leader in renewable energy FPL Group is constructing and/or actively developing clean energy projects and is investing in clean energy sources: modernizations, nuclear, solar, wind, emerging technologies, and at the same time, is pursuing other alternative energy projects and technology: landfill / waste energy, concentrated solar photovoltaic, offshore wind, ocean current and ocean thermal, cutting edge monitoring, control and predictive system.

Mr. Bates spoke about the solar facilities that are being built in Florida by FPL. These constructions will provide enough power to serve nearly 20,000 homes and businesses; help create of over 1,500 skilled-labor jobs and will make FLP the number two producer of solar energy in the U.S.

## Bylaws

*Ron Ambrosio, Chairman*

During the web meeting on December 11, 2009, Richard Schomberg brought up a question about possibly revising the bylaws and changing a chairman term to two years. A short discussion took place. The present council members did not feel strongly to make the motion to change the term of the chairman and no other suggestions were submitted.

## Constitution Update discussion

The process of developing the Constitution in 2005 was revisited where an important part was the interview process over the six months period and further discussions until the agreement was reached. "It was a process to start both understanding our own view points and making sure we understood how those differed or were shared with a broader community and trying to start capturing at a very high level some level of consensus what is Interoperability in the

context of the smart grid. And that process also made it easy to move onto the next step and start developing the Interoperability Frame work,” said Ron Ambrosio. “Process we used was as important as the end result.”

Ron Melton noted that there is a need to come up with the mechanism of engaging business and policy community and discussing with them the problems of interoperability, how the business models effect lower layers of activity, how policy effects the business models, etc. He said that “as we carry out that discussion, we can address the deficiencies in the Constitution.”

The main points of the discussion were:

*- redefine the existing “Regulatory Principles” section or create a complimentary “Policy Principles” section*

Nora Brownell agreed that policy section would speak more specifically to the governors, legislator and a little bit to the regulator. And regulators have a function that needs to be addressed separately.

Bill Cox suggested to interview regulators and others who drive the policy and demonstrate a high degree of consistency in terms of communicating the price, the schedule, future usage of information. It may need an incremental process.

*- incentivize the consumers, rate structure and regulatory definitions of business structures have to be designed to encourage and enable it.*

Ron Melton said that “interoperability as a principle of operation should be explained as a way to reduce risk.”

Ron Jarnagin summarized that it is important to capture the notion of cost savings.

*Ron Ambrosio raised the question of the ways to communicate the principles GWAC is trying to develop.*

*- resocialize and socialize for the first time with the many new people in the smart grid community*

Target involvement of the following groups: SGIP GB, SGIP Architecture Committee, FERC-NARUC Smart Grid Collaborative.

Ron Ambrosio suggested targeting Grid-Interop 2010 forum “to have something to ratify” by then.

*- developing Amendments to the Constitution*

Tracy Markie suggested developing some review trigger requirements that cause Council to review the Constitution. Ron Ambrosio agreed. The working group will be formed to create a short document for the Council’s review and approval.

Ron Melton said that “it is important to formulate the importance of making changes in order to engage the community to validate these principles. “

*James Mater suggested a creation of the task force or group to focus on the issue and to start a dialog, set directions to go and interviews.*

Bob Saint suggested creating a tutorial “Interoperability 101” toward policy and regulation efforts.



Ron Melton pointed out the importance of having continuing positive impact of GWAC work and engagement in NIST, through FERC to promote interoperability. “Council has the power to facilitate the discussion.”

Actions:

- Form two working groups:
  - to establish requirements for the periodical review of the constitution (short check list with criteria, important things to consider but broad and general,- why it is important enough to make the change) and
  - to formulate principles around the “promotion of the policy and regulations that facilitates multi-jurisdictional applications” and make a suggestion on how to drive the socialization process including the reasons .
- Look into creating “Interoperability 101”
- Determine which events and to what extend council will be involved in: GridWise® Expo, GridWeek, Grid-Interop, Connectivity Week, GridWise Forum.

## Grid-Interop 2010 Planning

*Ron Jarnagin*

The forth Grid-Interop forum will take place in Chicago, IL on December 1-3, 2010. The planning of the meeting will begin in February, 2010 with the assembly of the planning and program committees and initiation of the committees’ meetings with active involvement of the NIST (Jerry Fitzpatrick) or SGIP (Erich Gunther). It is important to have council members’ involvement in overall planning of the event and, as track leads, who would be a part of the program committee as well. This year Council needs to define the tracks prior to the call for abstracts announcement to stay focused on the desired content in the submitted papers.

Collocating Grid-Interop 2010 and SGIP meetings should make both events more successful. Joint planning process is important to ensure the success.

Actions:

- Establish program and planning committees and set up meetings’ schedule. Ensure active involvement of NIST and SGIP.

## Decision Maker's Checklist update

*Ron Melton, GWAC Administrator*

Idea of updating the Checklist came up during GWAC meeting in Knoxville in the summer of 2009. Analysis of the GridWiseAC.org website activity showed that between January 2008 and December of 2009 there were 3300 hits downloading this document.

A survey has been drafted and will be used to conduct either individual face to face interactions or surveys of the large groups such as SGIP, GridWise Alliance. This will help in collecting feedback on the GWAC’s activities and Decision Maker's Checklist usage.

“We envision that using the basic checklist we have now and the feedback we receive from conducting the interviews/surveys, extensions could be created: regulators extension, executive making inducement decision extension; engineer trying to choose vendors extension,” said Ron Melton.

Phil Slack said that “there are mountains of information, and it is hard for the industry to keep up.” He believes that GWAC can help educate and navigate to where answers could be found. Suggested a creation of the simple flow chart to indicate where SGIP, GWAC, NARUC fit in the smart grid industry.

Ron Melton said that it gives him an idea to add to the Decision Maker's Checklist “who is who” in the interoperability section. Ken Wacks suggested putting together a checklist of the major governing documents for the smart grid.

Actions:

- Put together or have a clear vision of the “Interoperability 101” educational session (possibly with on-line version, which was suggested by Nora Brownell)
- Finalize the survey by mid-February, gather survey data – by end of February, define improvements to be made to the checklist & update core – by GridWise Expo.

## **GWAC Metrics**

*Ron Melton, GWAC Administrator*

In order to measure success for GWAC going forward and to evaluate the possible need for GWAC’s input, the following observations were made.

There is an opportunity for the Council to help putting together basic Interoperability 101 material and work with DOE to raise the level of understanding within the SG Investment Grant and Demo recipients what interoperability is about and to make “the right path” easier to follow. Ron Melton suggested creating a group to define the content, and discuss the various ways how it can be delivered later.

Phil Slack agrees strongly that this is needed to help educate the Grant recipients and is needed very quickly in order to bring uniformity. “Taking checklist context and putting four documents, not fifty, into an educational packet for DOE to present as a point of information,” said Mr. Slack, “would make lives of the SGIG participants much easier.”

Improving page ranks would draw more visitors to the website. Tracking access to GWAC publications and calculation of the citation index with the help of IBM library are important for understanding the impact GWAC is having in the intellectual discourse.

Actions:

- Start work on putting together an educational packet as a point of information for DOE to give out to the SG Investment Grant and Demo recipients. 1- Immediate simple suggested by Phil, 2- Interoperability 101 session that could be in parallel to the formal “Smart Grid 101” class that Erich Gunther is developing. Creation of a group to define the content may be needed.
- Layout plan for the outreach activities to educate community on interoperability focusing on the upper levels of GWAC Stack

## **GridWise® Alliance - Advocating for a Smarter Grid**

*Presented by Katherine Hamilton, President, GridWise® Alliance*

Katherine Hamilton, a first full time president of the GridWise® Alliance (GWA), that was founded in 2003 and has developed into an organization that represents a broad range of the

energy supply chain from utilities to large technical companies to academia to venture capitalists to emerging technical companies. It is a public interest organization, technology neutral.

GridWise® Alliance completes projects in work groups: Legislative and Policy, State Legislative and Policy, Interoperability and Cyber security (top priority), which Includes data privacy subgroup, Implementation, which includes Consumer Engagement subgroup, Education and Workforce.

Katherine Hamilton spoke briefly about a new event that is being developed in a partnership with the U.S. Department of Energy– GridWise® Global Forum that will take place on September 21-23, 2010 in Washington DC. The GridWise® Global Forum will bring together an international policy leaders, corporate leaders and technology innovators from North America and around the globe to share their experiences with today’s smart grid deployments and visions for a smart grid over the next two decades. It would be a great opportunity for GWAC to get involved and GWA will keep the Council informed on the developments of this event.

Ron Melton pointed out that the GWAC’s Check List document is “targeting the same audience in order to make sure they understand the need to define new business models to address interoperability as a concept and all levels of GWACK Stack.”

### **High-performance message transport for Interoperation of IP-based Systems**

*Presented by Terry Sick, VP, Product Development and Engineering and  
Jake Thompson, Manager, Research and Development (EnerNOC)*

Terry Sick provided an overview of the EnerNOC that was founded in 2001 and is publicly traded on NASDAQ (ENOC) since May 2007. The company is a market leader in demand response and provides an Innovative Smart Grid Energy Management Services for Businesses and Institutions.

EnerNOC’s PowerTrak Platform Enables Demand Response Event Management. It is based on XMPP (IETF standard RFC 3920 and RFC 3921) and enables secure, instantaneous transfer of energy data, which enhances demand response resource reliability. PowerTrak also enables rapid site installation by avoiding the need for a virtual private network (VPN) connection to the end-user IT network.

### **Interoperability Maturity Model (IMM)**

*Presented by Steve Widergren, Principal engineer, PNNL*

Steve Widergren presented with the IMM objectives such as metric for measuring interoperability progress in a community, guidance for improving interoperability at the community/national level, and promoting an interoperability-aware “culture”.

Patterned after product lifecycle process improvement SEI CMMI and using NEHTA proposed IMM and work of Alex Levinson, Rik Drummond and James Mater, this work is “targeting development of the concept to characterize Interoperability maturity from both the product and the process point of view,” said Mr. Widergren.

As a next step, Steve Widergren envisioned to reinvigorate the IMM team of GWAC members: Alex Levinson and Rik Drummond and colleagues: James Mater, Terry Oliver, Andreas Tolk, and Austin Montgomery, propose a draft model and provide an example. The following step would

be a review and refining process with GWAC engaging the community -SGIP, industry, regulators.

Discussion during this meeting clearly indicated preference for a process improvement focus rather than a product/function focus.

Actions:

- Continue the discussions during web meetings with the GIMM team trying to define a path forward.

### Summary of the Action Items

Action Item	Assigned To	Due Date
Coordinate publications of the technical papers submitted to Grid-Interop 2009.	Ron Jarnagin Dave Hardin	March 2010
<u>Call for candidates 2010:</u> Schedule the web meeting for the Nominations Committee Conduct the voting process	GWAC Administration	Mid-February 2010
<u>GWAC meetings:</u> – Schedule a phone meeting in March, 2010 – Determine a location for the meeting in April, 2010. – Secure dates for the GWAC meetings through the end of 2010. – Decide if GWAC will hold a meeting before/ after the CES in January of 2011.	GWAC Administration GWAC members GWAC members	January 2010
<u>Outreach:</u> – Layout plan for the outreach activities to educate community on interoperability focusing on the upper levels of GWAC Stack and determine which events and to what extend Council will be involved in: GridWise® Expo, GridWeek, Grid-Interop, Connectivity Week, and GridWise Forum. – Put together or have a clear vision of the “Interoperability 101” educational session (possibly with on-line version) – Start work on putting together an educational packet as a point of information for DOE to give out to the SG Investment Grant and Demo recipients. Creation of a working group to define the content may be needed. 1- immediate with a set of documents to bring uniformity 2- “Interoperability 101” session as part of an effort	GWAC members  GWAC Administration/ GWAC members GWAC Administration/ GWAC members	March 2010  November 2010  February 2010
<u>Constitution update:</u> <i>Form two working groups:</i> -to establish requirements for the periodical review of the constitution (short check list with criteria, important things to consider but broad and general, why it is important enough to make the change) - and to formulate principles around the “promotion of the policy and regulations that facilitates multi-jurisdictional applications”	Ron Jarnagin	February 2010

Action Item	Assigned To	Due Date
and make a suggestion on how to drive the socialization process including the reasons .		
<u>Grid-Interop 2010:</u> Establish program and planning committees for Grid-Interop 2010 event and set up meetings' schedule. Ensure active involvement of NIST and SGIP.	Ron Jarnagin	02/28/2010
<u>Decision Maker's Check list Update</u> – finalize the survey – gather survey data – define improvements to be made to the checklist & update core	Decision Maker's checklist team	mid-Feb end Feb end May
<u>Interoperability Maturity Model</u> Continue the discussions during web meetings with the GIMM team trying to define a path forward.	Steve Widergren	March 2010