GridWise Architecture Council Meeting
Web Meeting

April 25, 2008

Meeting Minutes

Council member Joe Bucciero led the meeting on behalf of Chairman Jack Mc Gowan who could only spend a short time at the meeting from 9:00 a.m. – 11:00 a.m. PDT on April 25, 2008.

Present

Architecture Council Members

Ron Ambrosio, IBM T.J. Watson Research Center
Joe Bucciero, KEMA Consulting
Rik Drummond, Drummond Group
Erich Gunther, EnerNex Corporation
David Hardin, Invensys Process Systems
Lynne Kiesling, Northwestern University
Alex Levinson, Lockheed Martin
Jack Mc Gowan, Energy Controls, Inc. (partial)
Russell Robertson, Tennessee Valley Authority
Richard Schomberg, Electricite de France
Ken Wacks, Broadband Energy Networks

Architecture Council Support

Steve Widergren, Pacific Northwest National Laboratory
Heather Kuykendall, Pacific Northwest National Laboratory
Ruth Taylor, Pacific Northwest National Laboratory

Speakers and Guests

Matt Brown, Ernst & Young LLP
Anto Budiardjo, Clasma Events
Randy Lowe, AEP

Not Present

Nora Mead Brownell, BC Consulting
Stephanie Hamilton, Southern California Edison

Proprietary Information Notice

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

Meeting Minutes Approval

The minutes from the March 25-26, 2008 meeting were approved with no changes. All meeting minutes are available at http://www.gridwiseac.org/meetings/meetingminutes.aspx.

Opening Comments

Ken Wacks asked if Edison Electric Institute (EEI) activities are relevant to GWAC and if the Council is monitoring their activities. Joe Bucciero and Ken Wacks offered to report on EEI activities during the regular Liaison Report during GWAC meetings in the future. Steve Widergren has a previous action to schedule GWAC participation in a couple EEI e-forum presentations. These e-forums reach out to regulators and the electric utility community. Some have had a listener base exceeding 1000 people.

Action Items:

- Joe Bucciero and Ken Wacks are to report on EEI activities during the next GWAC meeting's Liaison Report. (due 19 May 08)

Upcoming GWAC Meetings

- **May 19-20, 2008** – face-to-face meeting in Santa Clara, CA co-located with Connectivity Week. We will plan to start the meeting at 8:30 AM. The room is reserved in the morning on May 20 for extended GWAC discussions, realizing that some members will be involved in the ConnectivityWeek plenary event that day.

- **July 11, 2008** – web meeting from 9 – 11 a.m. PT or possible face-to-face meeting that may involve team and committee meetings. This will be discussed further at the next GWAC meeting. Both Erich Gunther and Joe Bucciero offered to host the meetings in their respective cities.

- **September 22, 2008** – face-to-face meeting in Washington, D.C. in conjunction with GridWeek, September 23-25

- **October 31, 2008** – web meeting from 9 – 11 PT

- **November 12-14, 2008** – Grid-Interop 08, target location Atlanta, GA. No regular GWAC meeting is planned in conjunction with the conference. Note that this date has changed from the original target date of November 11-13.

Action Item:

- Heather Kuykendall will coordinate logistics for upcoming meetings with council members. (ongoing)

- Council will discuss the options for a July face-to-face meeting that may involve team and committee meetings. (due 19 May 08)

ConnectivityWeek Preparations

The ConnectivityWeek program has doubled in size from last year's conference, and is being held in Santa Clara, CA to attract the high-tech community.

Several Council members will be involved in various tracks:

- Tuesday Plenary: Brownell and Mc Gowan
- GridWise Expo
    - EISA 2007 Workshop: Mc Gowan, Widergren
    - Smart Grid Opportunities: Ambrosio, Wacks, Bucciero
    - AMI Implementation Roundtable: Gunther
- IndConn
    - I2G Summit: Hardin and Ambrosio
    - Industrial IT Connectivity: Hardin and Drummond
- BuilConn: Mc Gowan
- HomeConn: Gunther and Wacks
- DR-Expo
    - DR Facts, Realities & Opportunities
    - Implementing Energy Responsive Buildings: Mc Gowan
- Smart Grid Basics: Gunther
- Enterprise Interoperability: Drummond

The GWAC will present "GridWise Applied" awards in two categories (organization and individual) during Connectivity Week. The Call for Nominations was distributed, and the nominations deadline is May 1. The Council approved the proposed nominations committee that includes Lynne Kiesling, David Hardin, and Ron Ambrosio. The nominations committee will perform a review of the nominees on May 2, and confirmation by the entire Council will follow. Steve Widergren is to coordinate with Anto Budiardjo to align the announcement of the GridWise Applied award with ConnectivityWeek press releases.

Action Items:

- The Nominations Committee (Kiesling, Hardin, Ambrosio) will hold a teleconference to discuss the nominees for the GridWise Applied award. (due 02 May 08)

- Steve Widergren will coordinate with Anto Budiardjo to align the announcement of the GridWise Applied award with ConnectivityWeek press releases. (due 19 May 08)

NIST Collaboration Status

NIST is working on a website for their EISA interoperability framework efforts, and has been meeting with stakeholders and other smart grid groups. A meeting was held on March 27 with FERC, NEMA, IEEE, NERC and GWAC. Joe Bucciero and Steve Widergren represented the Council at that meeting. NIST is invited to discuss their efforts with the FERC/NARUC SG Collaborative on May 6.

The Council encouraged Steve Widergren to continue his discussion with Jerry FitzPatrick from NIST about the possibility of merging Grid-Interop '08 with their anticipated Smart Grid Standards workshop, tentatively scheduled for October 2008. Anto Budiardjo has not signed a contract yet for the Grid-Interop venue, but will need to know soon about a possible change in dates for Grid-Interop '08. He needs to know quickly if other arrangements are needed.

Action Item:

- Steve Widergren will work with Jerry FitzPatrick regarding aligning Grid-Interop '08 and the NIST October workshop. (due 19 May 08)

FERC-NARUC SG Collaborative

A meeting of the FERC-NARUC Smart Grid Collaborative is scheduled for May 6-7. The Collaborative is co-chaired by FERC Commissioner Suedeen Kelly and New Jersey Commissioner Fred Butler, Vice-President of NARUC. Four groups have been invited to join this meeting to provide information about smart grid activities: DOE, NIST, PNNL, and EPRI. Carl Imhoff and Steve Widergren will represent PNNL at the meeting, and will leverage GWAC products such as the Decision Maker's Checklist as supportive material to address some of the regulation issues. Steve will forward his presentation points to the Council for comments.

Lynne Kiesling mentioned that she is working with FERC Energy Innovation Sector chief, Ray Palmer, regarding for the Galvin Initiative. This also provides her with the opportunity to promote GWAC concepts.
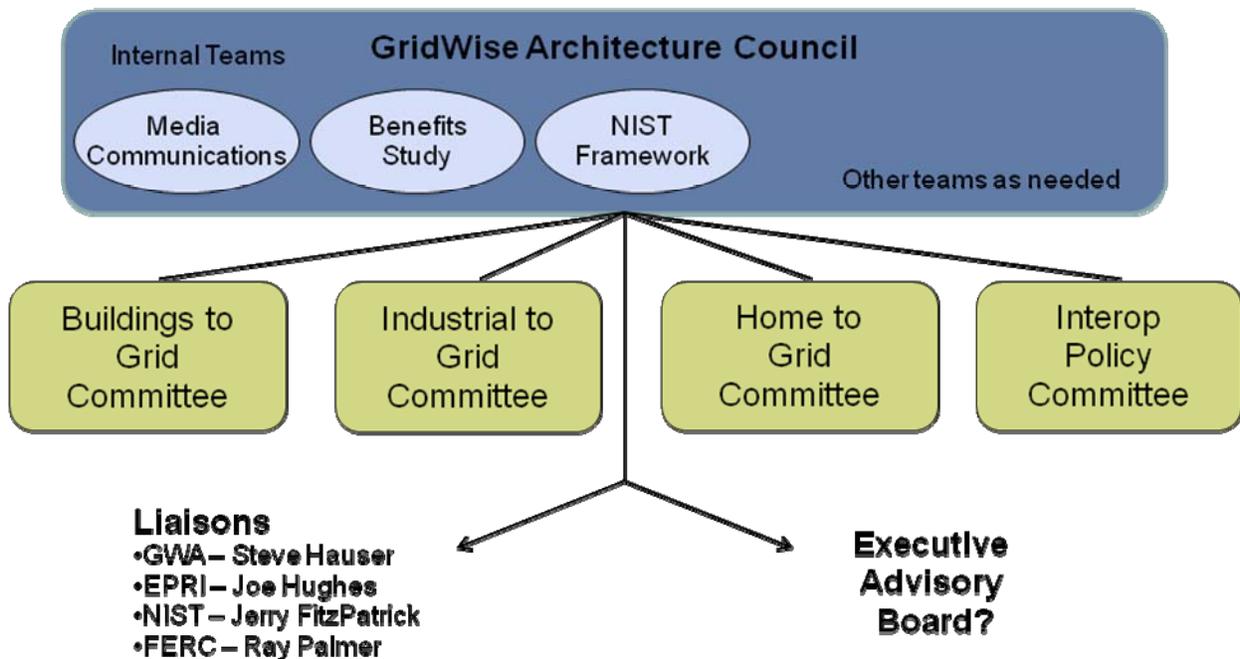
Action Items:

- Steve Widergren will forward his presentation points to the Council from the FERC/NARUC meeting on May 6-7. (due 2 May 08)

Extended GWAC Organization

An outline of the extended GWAC organization was presented, based on discussion at the GWAC meeting in March. The diagram included internal teams, external committees, and liaisons. The concept of an executive advisory board was added to remind council members of the idea, but will require more discussion. It is intended to be a group of high-level external executives from various organizations, but the role and expectations of the group has not been defined. The Council is to look at this function at a future meeting.

A concern was raised that it will be important to maintain consistent patterns of operation between committees, especially regarding public information disclosure and alignment with the Bylaws. Ron Jarnagin and Steve Widergren have an action from the March GWAC meeting to draft the roles and responsibilities for the various extensions of the Council, and this issue will be addressed in the governance document.

Various Council members had actions to draft proposals for the mission and strategies of the teams and committees. Progress has been made on three team formations:

➢ NIST Interop Framework Team

David Hardin, Ron Ambrosio, and Steve Widergren held a teleconference on April 14 and drafted a proposed outline of the team with additional input from Rik Drummond and Joe Bucciero:

- Mission/Purpose:
    - Collaborate w/ NIST to advance interoperability in support of smart grid applications.
- Objectives:
    - See that GWAC interoperability principles are adopted or revised to address any concerns
    - Leverage the GWAC Framework to support NIST work
    - Ensure that interoperability community development incorporates NIST efforts
- Strategy
    - Familiarize NIST with context-setting framework and companion material
    - Consider new versions and other material to align shared concepts
    - Consider NIST partnership in Grid-Interop and other coordinating forums
    - Encourage NIST participation in GWAC committee extensions (B2G, I2G, H2G, etc.)
- Proposed Structure in GWAC
    - Constitute initially as a GWAC/NIST team rather than an external committee organization
    - Establish direct NIST participation: Jerry FitzPatrick and other NIST team members
    - Team should lay the foundation for the NIST/GWAC working relationship
    - Potential to grow to an external committee organization of GWAC or NIST
- Proposed Team Membership
    - Consider GWAC context-setting framework team members, and others interested
    - Lead: start with a GWAC member, as NIST will likely initially want to participate, but not drive

Volunteers for membership on the NIST Interop Framework Team include Richard Schomberg, Rik Drummond, Ron Ambrosio, David Hardin, Erich Gunther, and Joe Bucciero. Steve Widergren will discuss this collaborative team further with Jerry FitzPatrick from NIST at a meeting on May 6-7.

➢ Industrial to Grid Committee

David Hardin drafted the proposal for the Industrial to Grid Committee:

- Mission:
  - The mission of the I2G Committee is to bring together stakeholders from the electrical grid utilities and system community and the industrial user and system community for the enhancement of interoperability, as defined by the GridWise Interoperability Framework.
- Objectives:
  - Extend and formalize the Council's work in the industrial domain and provide a vehicle for:
    o Better understanding of industry's role and interactions with the smart grid
    o Providing a conduit for government and the private sector to interact and collaborate
    o Identifying relevant standards and working with standards organizations for adapting those standards to the smart grid
    o Collaboration between electrical standards organizations and industrial standards organizations
    o Collaboration between industrial standards organizations for improved smart grid interoperability
    o Drive toward COTS interoperability by raising visibility of smart grid opportunities within industrial system vendors
- Goals and Deliverables:
  - The Committee will provide a set of high-level usage scenarios and architectural diagrams that articulate the interactions between smart grid systems and industrial systems at key interface points throughout the electricity supply chain.
- Proposed Structure:
  - GWAC Sponsor (GWAC member)
    o Role - Monitor activities and report back to Council
  - Committee Chairman (May be the same as GWAC Sponsor)
    o Role - Organize and preside over I2G meetings
  - Committee Secretary
    o Role - Organize meeting minutes
  - Committee Members
    o Role – Perform the work of the Committee
    o Proposed Membership – 12 with equal participation of:
      ▪ Industrial automation vendors - 3
      ▪ Grid automation vendors - 3
      ▪ Industrial companies - 3
      ▪ Grid utility companies - 3

Council members commented that they would like the Committee Chairman to be an external participant, at least in the long term. It was also recommended that the role of Committee Secretary be changed to Co-Chairman/Assistant Chair/Vice-Chair, who could fill in for the Committee Chairman during an absence. Another suggestion was to include a position for Media Communications. Steve offered the idea of filling the secretarial role with a GWAC administrative resource.

Concerning the number of participants in the committee, Ron Ambrosio mentioned that it would be helpful to find a minimum number needed on the committee for diversity, and not let the group get to large, but allow the committee to increase or reduce in number. The Roles and Responsibilities document will also cover this issue. The chairs of each team and committee are to hold a teleconference to discuss start-up of the groups for uniformity.

➢ Interop Policy Committee

Ruth Taylor and Lynne Kiesling drafted an outline of the Interop Policy Committee during a teleconference on April 18:

- Purpose:
  - Assist policy makers as they consider implementing smart grid policies which incorporate interoperability.
- Scope of Activities:
  - Assist FERC and NARUC in their smart grid efforts by communicating the importance of interoperability and related considerations. (Example: engage the FERC/NARUC Smart Grid Collaborative)
  - Serve as a resource to state and federal policy makers, and trade organizations who are considering the implementation of smart grid policies.
  - Help form a structured approach to implementing smart grid policies that could be used by policy makers across the nation.
  - Create supporting materials such as additional versions of the decision makers' checklist for targeted users.
  - Assist the Council to more clearly define smart grid policy interoperability implications and their benefits to policy makers.
  - Conduct face-to-face committee meetings during Grid-Interop '08 and other smart grid related meetings and arranging conference calls.
- Partial List of Potential Startup Members:
  - GWAC: Lynne Kiesling, Erich Gunther, Ron Ambrosio, Nora Brownell
  - Emeritus: Alison Silverstein, Eric Wong
  - External: Ray Palmer, Suedeen Kelly, Jon Wellinghoff, Fred Butler, and others to be identified

Richard Schomberg and Ron Ambrosio offered that the GridWise Alliance would be an important addition to the Policy Committee, and an IBM/GridWise Alliance contact was recommended to the Council. Ron Ambrosio is to follow up with the contact. Additional volunteers for the committee include Richard Schomberg and Joe Bucciero. The team is to identify other constituents who need to be represented in this committee.

Action Items:

- Steve Widergren will further discuss the NIST Framework Team with Jerry FitzPatrick from NIST. (due 7 May 08)

- The chairs of each team and committee are to hold a teleconference to discuss start-up of the groups for uniformity. (due 19 May 08)

- Ron Ambrosio will follow up with the IBM/GridWise Alliance contact for membership into the Interop Policy Committee. (due 9 May 08)

- Council members will submit their interest in the various team extensions to Steve Widergren. (due 9 May 08)

- Ron Jarnagin and Steve Widergren will include a committee structure template in the proposal for committee roles and responsibilities. (due 19 May 08)

Benefits Papers

Ruth Taylor reported on the progress of the contracted benefits papers. Harbor Research is due to submit a draft of the Financial Benefits paper by mid-May. The contract for the Environmental Benefits paper is nearing completion. The contract office is still waiting for a response to the Reliability Benefits request for proposal.

Grid-Interop '08 Planning

A 10-member planning committee was proposed and agreed on by the Council:

- GWAC: propose Hardin, Drummond, Bucciero
- External champions: 3 TBD
- Event organizer: Budiardjo
- Administration: Jarnagin, Taylor, Widergren

A preliminary schedule for Grid-Interop was offered to the Council for comments. Time was set aside at the beginning of Day 1 and at the end of Day 3 for Committee meetings, and the Council agreed this was a good strategy.

Day 1			Day 2			Day 3		
Arch	Biz	Tech	Arch	Biz	Tech	Arch	Biz	Tech
Possible Committee Meetings I2G, B2G, H2G, Policy			Opening Plenary			A4	B4	T4
			Session A1	Session B1	Session T1	Open Committee Mtgs.		
						A5	B5	T5
Registration			Lunch			Lunch/ Closing Plenary		
			A2	B2	T2			
Foundational Sessions?			Open Committee Mtgs.			Possible Committee Meetings I2G, B2G, H2G, Policy		
Game?			A3	B3	T3			
Welcome Reception			Dinner and Networking					

Summary of New Action Items

Item	Owner	Due Date
Joe Bucciero and Ken Wacks will report on EEI activities during the next GWAC meeting's Liaison Report.	Bucciero & Wacks	19 May 08
Heather Kuykendall will coordinate logistics for upcoming meetings with council members.	Kuykendall	ongoing
Council will discuss the options for a July face-to-face meeting that may involve team and committee meetings.	Council	19 May 08
The Nominations Committee (Kiesling, Hardin, Ambrosio) will hold a teleconference to discuss the nominees for the GridWise Applied award.	Kiesling, Hardin, & Ambrosio	02 May 08
Steve Widergren will coordinate with Anto Budiardjo to align the announcement of the GridWise Applied award with ConnectivityWeek press releases.	Widergren	19 May 08
Steve Widergren will work with Jerry FitzPatrick regarding aligning Grid-Interop '08 and the NIST October workshop.	Widergren	19 May 08
Steve Widergren will forward his presentation points to the Council from the FERC/NARUC meeting on May 6-7.	Widergren	2 May 08
Steve Widergren will discuss the NIST Framework Team with further with Jerry FitzPatrick from NIST.	Widergren	7 May 08
The chairs of each team and committee will hold a teleconference to discuss start-up of the groups for uniformity.	All Team and Committee Chairs	19 May 08
Ron Ambrosio will follow up with the IBM/GridWise Alliance contact for membership into the Interop Policy Committee.	Ambrosio	9 May 08
Council members are to submit their interest in the various team extensions to Steve Widergren.	Council members	9 May 08
Ron Jarnagin and Steve Widergren will include a committee structure template in the proposal for committee roles and responsibilities.	Jarnagin & Widergren	19 May 08