Meeting Minutes
Prepared 20 October, 2006

The meeting was held from 8:00-10:00am Pacific Time and led by Rik Drummond, GWAC Chairperson. The following individuals were present:

Architecture Council Members
- Ron Ambrosio, IBM T.J. Watson Research Center
- Jay Britton, AREVA-T&D Corporation
- Rik Drummond, Drummond Group Inc.
- Erich Gunther, EnerNex Corporation
- Dave Hardin, Invensys Process Systems
- Lynne Kiesling, Northwestern Univ. & IFREE
- Mike McCoy, Becker Capital Management
- Jack McGowan, Energy Controls, Inc.
- Alison Silverstein, Consultant
- Don Watkins, Bonneville Power Administration

Architecture Council Support
- Steve Widergren, PNNL
- Olga Anna Kuchar, PNNL
- Mia Paget, PNNL

Not Present
- David Cohen, Infotility
- Larsh Johnson, eMeter Corporation
- Stephanie Hamilton, Southern California Edison
Proprietary Information Notice
The members were reminded of the proprietary information disclosure policy from the Bylaws.

Review of 6-7 September 2006 Meeting Minutes
The minutes for the September 6-7, 2006 meeting in Santa Fe, NM were distributed and changes were submitted. The changes will be sent by e-mail to the Council members for their approval. The members will accept/decline these changes by e-mail voting.

November 29-30 GWAC Meeting: Golden, CO
The next GWAC face-to-face meeting will be held November 29-30, 2006 in Golden, CO at the Golden Hotel (http://www.goldenhotel.com) – a hotel and conference facility.

A coinciding activity discussed by the Council members is an opportunity to visit the Grid Simulation Laboratory and the Engines and Energy Conversion Laboratory in Fort Collins. The Grid Simulation Laboratory is a joint effort by Colorado State and Spirae, Inc. to test “smart grids” which are new ways to connect electrical generators and users to increase the efficiency and reliability of the electrical grid in large, complex distributed power systems. The Engines and Energy Conversion Laboratory establishes emissions measurement capabilities for combustion sources. Dr. Bryan Willson and Dr. Wade Troxell (Colorado State) and Dr. Sunil Cherian (Spirae, Inc.) will present the work at these laboratories and provide a tour for the Council members. The distance to the laboratories is estimated at 1.1 hours away from Golden.

The Council members agreed to speak to the following potential guest speakers: Ray Gifford (Colorado PUC Chairman), Dan Sharplin (Site Controls), Catherine Allen (Executive Director of BITS), and Wade Troxell (Colorado State University and member emeritus).

Action items:

• Members should make reservations at the Golden Hotel as soon as possible, preferably by October 27, 2006.

• Steve Widergren and Olga Kuchar will identify an appropriate time/place in the Council’s Golden agenda to visit the laboratories.

• Steve Widergren will contact Bryan Willson, Wade Troxell, and Sunil Cherian. Alison Silverstein will contact Catherine Allen. Alison Silverstein confirms that Dan Sharplin will attend the meeting. Lynne Kiesling will contact Ray Gifford. Contacts should be made by October 27, 2006.

Member Renewal and Call for Candidates
Larsh Johnson, Jay Britton and Jack McGowan have their terms ending on the Council. Jack McGowan has decided to renew his membership and has asked the Council for their consideration in the candidate process. Jay Britton needs to inform Steve Widergren of his decision to renew. Existing members only need to submit a letter of commitment for a new 2-year term from their sponsoring organization for candidacy material.

A draft “Call for Candidates” memo was circulated to the Council members. The Council discussed the attributes identified in the memo. Discussions for the main targeted areas included:
• Agreement on the power operations being a significant area for coverage.

• Power energy management, communications networking and building and home automation should also be stressed as significant areas for coverage given the members whose terms are expiring.

• Move up the stretch bullet that captures consumer advocacy (includes energy acquisition/energy management in the commercial and industrial fields) and make it one of the main areas.

The Council also discussed the attributes identified for the stretch areas. Discussions included:

• Some members felt that the stretch attributes regarding IT already have coverage on the Council, but given the technical aspects of interoperability, it is important to have good representation of this type of knowledge.

Mia Paget noted that we should be sensitive to candidates that are reapplying for Council positions that have been declined in the past. Existing members renewing their terms may make it difficult for these people to be selected. Suggestions were made that the announcement should address the number of open seats and the number of renewing Council members to give a better description of opportunity. Steve Widergren, Lynne Kiesling, and Mike McCoy agreed to help in addressing this concern during the candidate process.

Action Items: Olga Kuchar will draft a new memo and redistribute to the Council members for further consideration.

Widergren, Kiesling, and McCoy to discuss approaches sensitive to returning candidates and their likelihood of being selected, given existing member renewal interest.

Chair Selection

The Council Chair position is open for nominations. This is a position held from January 1 to December 31, 2007. Rik Drummond described this position as a person who leads the Council members in ways that are beneficial to the Council, and not necessarily a venue to push certain interests. The cohesion of the Council is very important and this is maintained by the Chairman. Overall, the position takes approximately one-third more time than what you spend currently on the Council. For example, if you spend 6 hours working on Council matters, then as chairman you would spend 8 hours in total. Two council members are required to nominate a candidate for selection as Chair. The voting for this position will occur at our meeting in Golden, CO.

Action Item: Send Chairman nominees to Steve Widergren and Olga Kuchar by November 15, 2006. Council members are encouraged to discuss potential candidates.

Interoperability Framework Whitepaper

The Interoperability Framework team (Ambrosio, Drummond, Cohen, Hardin, Watkins, and Widergren) has been meeting weekly to refine their interoperability whitepaper to be used for the Workshop Forum. Mike McCoy has joined this team and their efforts and Erich Gunther is contributing an example scenario. The newest draft of this whitepaper was sent to Council members on Thursday, October 19, 2006. This draft includes updates to the introduction, categories, and issues sections of the paper. The team would like to thank Dave Hardin for supplying a lot of the verbiage and revisions for these sections. This document still needs more input and refinement so
that the workshop attendees can turn it into a better document. The examples scenarios being developed by Erich Gunther and Dave Cohen are still in progress. More work needs to be done under the philosophical tenets section.

The Council reviewed the Gantt chart depicting the steps leading up to an Interoperability Forum. The whitepaper is not completed at this time and still requires a few more weeks of additions and refinements. Due to this, the workshop timeframe is now in January 2007. This gives the Council members more time to identify potential attendees for this workshop.

Action Items: Steve Widergren is to reconvene weekly meetings of the Interoperability Framework Team. Olga Kuchar and Rik Drummond will work together to capture more of the applications relating to the framework. Olga Kuchar will send a draft attendee list to the Council members for more input.

Naming and Identification Whitepaper

Rik Drummond gave a status update to the Naming Whitepaper. The team expanded key points from the presentation viewed by Council members in Santa Fe, NM. This draft whitepaper has been circulated to the Naming team for further additions and refinements. One of the key questions posed by Rik Drummond is to what extent do we want to dive into the technical issues?

Action Item: Olga Kuchar is to schedule the next team meeting. The Naming team is to continue to refine the document for a November release to the Council members.

Policy/Regulatory Whitepaper

Lynne Kiesling gave a status update to the Regulatory Whitepaper. Integration efforts are underway for the checklist being developed by Erich Gunther and Ron Ambrosio. The new release date for drafts of both the whitepaper and the checklist is before our Golden meeting on November 29th.

Action Item: Olga Kuchar is to schedule a call between Ron Ambrosio and Erich Gunther the week of October 23rd. Policy/regulatory team to continue to refine the document for draft release by November 29, 2006.

GridWise Website

Alison Silverstein offered concerns about the GWAC website (http://www.gridwiseac.org). There is a need to update the website to include current activities, such as whitepapers. There is a Goggle issue that Mia Paget brought to our attention and will be resolved shortly. There was also an expression of interest in having other GridWise pages link to the Architecture Council’s webpage.

Action Item: Alison Silverstein will work with Olga Kuchar to capture her thoughts and ideas in updating the website. Alison Silverstein would like 30 minutes on our Golden Agenda to discuss visibility for marketing.

GridWise Metrics

Alison has distributed an initial list of progress measures for GWAC member review.

Action Item: Council members to review the progress measures proposal and be prepared to discuss at the meeting in Golden.
Outreach Activities Summary

- Erich Gunther presented at MADRI. The audience agreed that interoperability is a good idea, but the GWAC may not have much impact on their near-term concerns.

- Alison Silverstein and Erich Gunther attended an IntelliGrid Policy Advisors Group meeting. They were very interested in the idea of a policy-related “checklist” for interoperability concerns.

- Anto Budiardjo will be the coordinator for GridWeek, set for April 23-26, 2007 at the Reagan Building in Washington, D.C. GWAC’s representative for planning is Mike McCoy. Steve Widergren and Jack McGowan will also help.

- Eric Lightner at DOE has hired a consulting firm to review efforts relating to DOE’s work on GridWise, and to offer strategic advice on how to better position and communicate the Department’s smart grid R&D objectives. The consultants will be contacting members of the GWAC.

- DOE will be hosting a meeting of important organizations working on the smart grid (including the GWAC, GridWise Alliance, Modern Grid and IntelliGrid), to discuss possibilities of a project in which all organizations could collaborate. This should help in a better understanding and coordination of activities between the various efforts. Steve Widergren will attend on behalf of the GWAC.

- Ron Ambrosio discussed the GridWise Expo in Europe. This expo is smaller than the one held in Palm Springs. It is a good idea to get EU Smart Grid community and US Grid community together to exchange ideas and knowledge, and indicate the synergy between Europe and North America. The Expo allows for more effective collaboration since the vendors, software, and services are similar between the two continents. It was recommended that the Council should think more globally in their vision.

- Jack McGowan is coordinating a GWAC panel to be held on January 30th for the AHR Expo held January 29-31, 2006.

- Alison Silverstein attended the DOE Research and Development Project Peer Review session. Alison suggested that the Council should follow and support the Eastern Interconnection Phasor Project, for wide-area monitoring of the grid as a promising example and opportunity for interoperability as a means to improve grid reliability.

Action Items:

- Ron Ambrosio to provide a list of contact names from the European Expo to Steve Widergren and Olga Kuchar (for example, Garret Schaeffer from the Dutch Energy Center, etc.).

- Any Council member interested in participating on the GWAC panel in the AHR Expo, please contact Jack McGowan.

- Please send any outreach activities to Terry Shoemaker for our September Outreach Report.
Upcoming GWAC Plenary Meetings

The dates for GridWeek are too far in advance to wait for a Council meeting. A meeting the end of February or early March was suggested. Other events happening around this time are the Power Generation Energy Conference (will be held in Las Vegas, NV the week of March 5, 2007) and the IEEE Southeast Conference (in Richmond, VA the week of March 22, 2007). This will be discussed further in Golden.

The dates for future meetings include:

- January 19, 2007 8-10 am Pacific Time: web meeting.
- January 2007: Interoperability Workshop, location TBD.
- Late February or Early March 2007 (window is February 26 – March 9): face-to-face meeting in either Phoenix, AZ or Las Vegas, NV.
- May 2007: web meeting.
- mid-June 2007: face-to-face meeting in Chicago, IL.
- August 2007: web meeting.
- October 2007: face-to-face meeting in Austin, TX.

New Action Items:

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Owner</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>248</td>
<td>Members should make reservations at the Golden Hotel.</td>
<td>All Members</td>
<td>27 Oct 06</td>
</tr>
<tr>
<td>249</td>
<td>Identify a time/place in the Council’s Golden agenda to visit the laboratories in Fort Collins.</td>
<td>Widergren Kuchar</td>
<td>28 Nov 06</td>
</tr>
<tr>
<td>250</td>
<td>Steve Widergren will contact Bryan Willson, Wade Troxell, and Sunil Cherian. Alison Silverstein will contact Catherine Allen. Lynne Kiesling will contact Ray Gifford.</td>
<td>Widergren Silverstein Kiesling Kuchar</td>
<td>27 Oct 06</td>
</tr>
<tr>
<td>251</td>
<td>Draft a revised “Call for Candidates” memo and redistribute to the Council members for further consideration.</td>
<td>Kuchar</td>
<td>27 Oct 06</td>
</tr>
<tr>
<td>252</td>
<td>Steve Widergren, Lynne Kiesling, and Mike McCoy t to discuss approaches sensitive to returning candidates and their likelihood of being selected, given existing member renewal interest.</td>
<td>Widergren</td>
<td>3 Nov 06</td>
</tr>
<tr>
<td>253</td>
<td>Send Chair nominees to Steve Widergren and Olga Kuchar by November 15, 2006.</td>
<td>All Members</td>
<td>15 Nov 06</td>
</tr>
<tr>
<td>254</td>
<td>Coordinate example use cases for the interoperability framework with inputs from Erich Gunther and Dave Cohen.</td>
<td>Drummond Kuchar</td>
<td>29 Nov 06</td>
</tr>
<tr>
<td>255</td>
<td>Send a draft workshop attendee list to the Council members for</td>
<td>Kuchar</td>
<td>31 Oct 06</td>
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<tr>
<td>256.</td>
<td>Schedule the next Identity/Naming team meeting.</td>
<td>Kuchar</td>
<td>31 Oct 06</td>
</tr>
<tr>
<td>257.</td>
<td>Naming team to continue refining their whitepaper and circulate to Council members.</td>
<td>Drummond</td>
<td>29 Nov 06</td>
</tr>
<tr>
<td>258.</td>
<td>Policy/regulatory team to continue refining their whitepaper and circulate to Council members.</td>
<td>Kiesling</td>
<td>29 Nov 06</td>
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<tr>
<td>259.</td>
<td>Collect ideas for GWAC webpage changes and schedule a discussion on marketing visibility.</td>
<td>Silverstein Kuchar</td>
<td>November</td>
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<td>260.</td>
<td>Provide a list of contact names from the European GridWise Expo to Steve Widergren and Olga Kuchar (for example, Garret Schaeffer from the Dutch Energy Center).</td>
<td>Ambrosio</td>
<td>October</td>
</tr>
<tr>
<td>261.</td>
<td>Council member interested in participating on the GWAC panel in the AHR Expo, please contact Jack McGowan.</td>
<td>All Members</td>
<td>December</td>
</tr>
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<td>262.</td>
<td>Please send any outreach activities to Terry Shoemaker for our September Outreach Report.</td>
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