

IntelliGridSM Program Newsletter

Providing technical progress and events updates

SECOND QUARTER 2005

PROGRAM NEWS

- **Meetings with GridWise** – Following up on suggestions received by the Steering Committee, the IntelliGrid Program's management met recently with different GridWise-related advisory bodies. The first meeting held in May, in Dallas, Texas, was attended by Rik Drummond, Chair of the GridWise Architecture Council and its members: Steve Widergren, Battelle, and Erich Gunther, EnerNex. A second meeting held in June, in Washington, DC, was attended by Chuck McDermott, Chair of GridWise Alliance, Steven Hauser, Executive Director, GW Alliance, and two Alliance members, Mike Weedall, BPA, and Ron Ambrogio, IBM. Both meetings concluded with the understanding of an urgent need for further coordination and cooperation. Both the GridWise Architecture Council and GridWise Alliance were invited to present their objectives and goals during the Steering Committee meeting scheduled in Washington, DC in August.
- **Electricité de France Hosts Workshop on IntelliGrid** – On May 24, EdF hosted an IntelliGrid Architecture Workshop in Clamart, France to review the project status and discuss the methodology. Prior to the workshop, pre-training was organized by EdF on Unified Modeling Language (UML). During the workshop, two application examples were presented on the reconfiguration of feeders and demand-response with building automation. The participants were aligned on the approach and had their questions answered. As a follow-up to the workshop, a technical tutorial will be developed to educate future users on the IntelliGrid Architecture.
- **Member Participation on the European Commission** – The following IntelliGrid partners are participating as candidate members of the First Advisory Council on the Technology Platform for the Electricity Networks of the Future under the European Commission: Mr. Yves Bamberger, Executive Vice President, Head of Corporate R&D, EdF; Mrs. Magdalena Wasiluk-Hassa, Director, PSE Operator, Poland; and, Mr. Nils Leffler, Group Senior Vice President, ABB Corporate Research, Sweden.

TXU Electric Delivery Hosts Consumer Portal Workshop

On May 17, TXU Electric Delivery hosted the Consumer Portal Workshop at their headquarters in Dallas, Texas. The objective of the meeting was to give the attendees an overview of the myriad of activities currently going on in the area of advanced metering and applications involving the consumer interface. The importance of network reliability and possible portal network architecture was discussed by Verizon. A presentation by Amperion featured the development of powerline communication equipment that delivers high-speed broadband over medium-voltage power lines. TXU Electric Delivery spoke on their new program that will replace all meters with Automatic Meter Reading Systems. Hydro-Quebec discussed their field testing of broadband over powerlines for internal and customer applications. The CERTS (Consortium for Electric Reliability Technology Solutions) presentation highlighted system convergence and integration.

TECHNICAL PROGRESS

IntelliGrid Architecture (previously Integrated Energy and Communications System Architecture)

- *Focus on Technology Transfer and Communications* – Through various communication tools, the project is improving the understanding and usefulness of the architecture results. Training has been conducted on the methods and concepts through workshops and web conferences with stakeholder groups. Work is underway to build relationships with key standards development organizations.
- *IntelliGrid Architecture Demonstration Project Development* – Developing demonstration projects is the key to implementing the IntelliGrid Architecture concepts. Workshops are held as a precursor to develop work scopes for potential projects. Several candidate projects are currently in development with IntelliGrid partners.
- *IntelliGrid at the IEC (International Electrotechnical Commission) Meeting in Ann Arbor, Michigan* – At the April 6-7 meeting, it was noted that more work needs to be done on business cases and user's guides for the IntelliGrid and IEC technologies. Brainstorming groups will be initiated between power system engineers and other experts to study the different ways of operating the grid. There is a strong desire for public information in order to improve innovation and the openness of the systems. Applications and algorithms are a key feature in ensuring the grid is safer and more reliable.

Open Communications Architecture for Distributed Energy Resources in the Advanced Distribution Automation Project

- *Draft in Process for IEEE P2547.3* – The working group has continued writing the second draft of the guide on monitoring, information exchange, and control. Three of the working group officers will meet at NREL to integrate the contributions of the individual clause writing teams into a complete second draft for review by the entire working group prior the August working group meeting.
- *IEC TC-57, Working Group 17 Receives First Draft* – The first draft was issued in April and comments are due in July. The committee draft addressed the object models for fuel cells, photovoltaic, and diesel generators. This may be the first standard issued that will cover these types unless vendor input can be obtained to complete models for the other device types such as Combined Heating and Power (CHP), storage, and microturbines. Once again, this working group seeks active, contributing members such as vendors, system

Check Us Out!

We will be talking about our Program at the following conferences:

EEI Annual Convention/Expo

June 19-22, 2005
Mandalay Bay Resort
Las Vegas, NV

Power Quality Applications 2005 Conference and Exhibition

June 27-29, 2005
Westin Bayshore Resort and Marina
Vancouver, British Columbia, Canada

IntelliGrid Steering Committee Meeting

August 2-4, 2005
EPRI Office
Washington, DC

EPRI Power Delivery and Markets Advisory Meetings

September 26-30, 2005
Westin Hotel
Charlotte, NC

IEEE Power Engineering Society, T&D Conference and Exposition

October 9-12, 2005
Ernest N. Morial Convention Center
New Orleans, LA

IntelliGrid Steering Committee Steering Meeting

November 1-3, 2005
Sacramento, CA

DistribuTECH 2006

February 7-9, 2006
Tampa Convention Center
Tampa, FL

integrators, utility, and other domain perspectives. Please contact Frank Goodman at fgoodman@epri.com for information related to working group participation.

Fast Simulation and Modeling

- *FSM Project Team Meets with TVA* – Preliminary meetings have been held with TVA planning and operations experts to identify suitable business cases for the cost and benefit methodology analysis.

Consumer Portal


- *New Document Available on IntelliGrid.com* – If you or your colleagues have any questions regarding the Consumer Portal project, we have the perfect document in an easy-to-read, question and answer format that provides the possibilities of what a consumer portal can be, overview concepts, and challenges of the project. The Consumer Portal Frequently Asked Questions (FAQ) and Survey is available by logging on to www.epri-intelligrid.com and by following this path: Technical Documents, Consumer Portal and you will see the Consumer Portal FAQ document.
- *Consumer Portal Workshop Information* – For additional information on the May 17th workshop, please contact Mark McGranaghan at mmcgranaghan@epri.com. There were many informative presentations at the meeting and the front page of this newsletter is a brief highlight of this important workshop.
- *Follow-up to Consumer Portal Workshop* – At the IEEE T&D show on October 9-12, 2005, there will be a Consumer Portal Panel Session with participation by the stakeholders. Be sure to attend this informative session.
- *Developing the Specifications for a Consumer Portal* – Anne-Lise Didierjean's and Mark McGranaghan's article has been published in the Metering International, Issue 2 publication. The article describes how the power system of the future will integrate major changes in functionality and advances in communications, computing, and electrical devices to evolve into an intelligent infrastructure. The interface between the electrical network and consumers is of particular importance.

If you need more information or have comments, please direct them to Marek Samotyj at msamotyj@epri.com or 650.855.2980. Details of program events can be found on www.epri-intelligrid.com

The Electric Power Research Institute (EPRI)

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