
ANNOUNCING the First International Conference and Workshop
Transactive Energy: Implementing the Future of the Electric System

May 23-24, 2013, World Trade Center, Portland, OR

The GridWise® Architecture Council, with support from PNNL, CISCO, Smart Grid Oregon and Portland General Electric, is pleased to convene the First International Conference and Workshop on Transactive Energy in Portland, Oregon, on May 23-24, 2013. The conference will be preceded by a GridWise Architecture Council (GWAC) meeting at the same location on May 21-22, 2013. PLEASE MARK YOUR CALENDARS!

Information about the workshop will be available on the GWAC website – www.gridwiseac.org and Smart Grid Oregon website at <http://www.smartgridoregon.org>.

From Theory to Practice

Traditionally, power system operations have been centrally managed with a focus on maintaining adequate capacity, power and reliability through bulk power markets and wholesale generation and transmission centralized operations. Distribution and retail operations have generally been based on a one-way supply model with little or no operational or market-based mechanisms for adjusting the demand side of the system. This structure is inadequate for future high penetrations of intermittent renewable and distributed energy resources (DER) integrated conventionally or through micro-grids. Distributed and hierarchical controls, services and pricing methods spanning bulk power and distribution system operations, retail markets with coordinated reliability and economic objectives, are needed to enable the the 21st century power system.

A number of research and development efforts related to Transactive Energy architecture, market designs, systems, services, pricing and standards are underway by universities, national labs, utilities and technology firms across the world. The term “transactive energy” is used here to refer to techniques for managing the generation, consumption or flow of electric power within an electric power system through the use of economic or market based constructs while considering grid reliability constraints. The term “transactive” comes from considering that decisions are made based on a value. These decisions may be analogous to or literally economic transactions.¹

The goal of the conference and workshop is to bring together organizations and researchers that have been researching, developing and deploying Transactive Energy techniques and business models. This forum is intended to facilitate accelerated development of Transactive Energy to enable scalable adoption of intermittent and distributed resources envisioned in existing policy worldwide. The Conference is part of the continuing work of the GridWise® Architecture Council in defining Transactive Energy and developing a framework for the industry to move forward under. This is the Council’s next major focus, continuing the strategic thinking started with the Interoperability Context-Setting Framework².

¹ Transactive Energy Workshop Proceedings 2012, prepared by the GridWise® Architecture Council, March 2012, PNNL-SA-90082 (<http://www.gridwiseac.org/historical/tew2012/tew2012.aspx>)

² GridWise® Interoperability Context Setting Framework (V1.1), prepared by the GridWise Architecture Council, March 2008, (http://www.gridwiseac.org/pdfs/interopframework_v1_1.pdf)

Conference Topics

The conference and workshop sessions and featured presentations are expected to address the following Transactive Energy topics.

- Distributed Energy Resources and Services for bulk power systems, distribution systems, retail markets and customers
- Control architecture & methods for a distributed and transactive power system
- Scaling distributed control and maintaining reliable system operations
- Market designs for Transactive Energy
- Cyber-Physical Infrastructure and Transactive Energy
- Barriers to Transactive Interoperability
- Case Studies in implementing Transactive Energy

Speakers and Workshop

The conference will be comprised of world-class invited speakers, papers and panelists on the topics outlined. There will be a blend of industry, utility, regulatory and academic practitioners and researchers involved in the conference.

Who Should Attend?

Researchers and practitioners that are researching, developing and deploying Transactive Energy markets, systems and business models should consider participating in this first global conference.

Benefits

Participants will gain insights into the leading efforts worldwide and meet leading subject matter experts who will share their knowledge – proving a unique opportunity to learn about the Transactive Energy state of the art and future direction. Given the long development cycles in the industry and implications of the current fast pace of DER adoption – can you afford to not attend?

Organizers/Sponsors

The Conference and Workshop is organized by the GridWise® Architecture Council as part of its mission to further the advanced thinking about the guiding principles, or *architecture*, of a highly intelligent and interactive electric system.

The Conference **Steering Committee** is made up of:

- Erich Gunther, Enernex, GWAC Chairman
- Paul De Martini, Newport Consulting, GWAC member
- Ron Ambrosio, IBM Research, GWAC Past Chair
- Ron Melton, PNNL, GWAC Administrator
- Terry Oliver, BPA
- Jeff Taft, Cisco
- James Mater, QualityLogic, GWAC Associate

The Conference **Operating Committee** is organized by Smart Grid Oregon and Portland General Electric.

This first of its kind conference offers industry participants an opportunity to demonstrate leadership, both in products and in industry evolution. There will be multiple sponsorship, exhibits and endorsement opportunities.