



Smart Grid Development

EnerNex can help you address many of the issues identified in the U.S. Energy Policy Act, particularly in implementing your own Smart Grid initiatives. This involves identifying specific applications that require advanced communication architecture or integration of existing islands of automation.

Our involvement in the EPRI IntelliGrid Architecture, DOE GridWise Architecture Council, DOE Modern Grid Initiative and a number of activities focused on advanced metering infrastructure allows us to cost-effectively implement a Smart Grid program within any utility at a scale appropriate for your needs. We are able to blend the best of our experience along with methodologies/processes utilized with these efforts to support your efforts towards building a better power system.

EnerNex Corporation is the pre-eminent consulting firm for **Smart Grid Development**.

Smart Grid applications include:

- Automatic Meter Reading
- Demand Response
- Real-time Pricing
- Advanced Distribution Automation
- Auto-Restoration
- Wide-area Protection
- Automatic Islanding
- Synchronphasor Measurement
- Real-time Contingency Analysis
- Distributed Energy Resources
- Renewable Energy

EPRI Deployment

EnerNex is helping deploy the EPRI IntelliGrid Architecture in the utility industry. Key components of this deployment include:

- ▶ Field applications ranging from narrowly-scoped automation projects to enterprise-wide integration
- ▶ Training workshops for utility partners & others
- ▶ Establishing and maintaining working liaisons with key industry standards organizations and consortia
- ▶ Encouraging standards harmonization and cross-pollination of technology between industry groups
- ▶ Miscellaneous technology transfer and industry outreach support

EnerNex



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EnerNex Experts

Since its founding, EnerNex has played a critical role in several industry efforts in helping to design, architect or otherwise facilitate a smart grid. EnerNex was part of the original team that developed the EPRI IntelliGrid Architecture. This team gathered information from several hundred industry stakeholders to develop dozens of use case scenarios for how the power system of today operates and how it should work in the future.

Our staff is at the top of the industry. We have employees involved with a number of key industry initiatives. In addition to the IntelliGrid Architecture, EnerNex is involved in other key Smart Grid initiatives:

- *DOE GridWise Architecture Council*
- *Galvin Electricity Initiative*
- *DOE Modern Grid Initiative*
- *Development of a reference design for demand responsive infrastructure for the California Energy Commission*
- *Facilitation for the formation of OpenAMI*
- *Coordinator/facilitator of the UtilityAMI organization*
- *Members of the UCA International Users Group, where company co-founder and principal consultant Erich Gunther sits on the board of directors.*

EnerNex Services

EnerNex is a research, engineering, and consulting firm specializing in the development and application of new electric power technologies. Our focus is to aid in the understanding and solution of electric power related issues, as well as the development of technology and expertise that will ultimately improve the operation and reliability of electric power systems. We offer services organized around these areas of emphasis:

- ▶ **Power Systems Analysis**
- ▶ **Wind Integration**
- ▶ **Information Security**
- ▶ **Systems Monitoring & Analysis**
- ▶ **Testing and Research & Development**
- ▶ **Smart Grid Development**
- ▶ **Advanced Metering Infrastructure**
- ▶ **Utility Communication Architecture & Implementation**
- ▶ **Utility Automation**
- ▶ **Demand Response & Energy Efficiency**

