



U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

North American SynchroPhasor Initiative

DOE Update

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Sacramento, CA

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Smart Grid Investment Grant Program

(all comments from stakeholders must be submitted to the web site)

Overview- <https://www.fbo.gov>

- **Competitive, merit-based solicitation; more than 1000 applications expected**
- **Covers electric transmission, distribution, and customer-side applications**
- **Deployment of Phasor Measurement Units (PMU) within the transmission system is a specific program goal**

Eligibility and Funding

- Applications expected from eligible entities such as electric utilities, load serving entities, appliance and equipment manufacturers, and IT vendors
- National Laboratories and Federally Funded Research and Development Centers are NOT eligible
- Expected project awards range from \$100,000 to \$5,000,000 for PMU projects; \$500,000 to \$20,000,000 for others
- Funding provided for up to 50% of qualified investments requested by grant applicants

Anticipated Schedule

Activity	Date
Notice of Intent (NOI)	April 16, 2009
Funding Opportunity Announcement (FOA)	After 30 day comment period for NOI (June, 2009)
FOA – Round 2, if necessary	December, 2009
FOA – Round 3, if necessary	April, 2010
All Funds Obligated	September 2010



Smart Grid Demonstration Program

(all comments from stakeholders must be submitted to the web site)

Overview - www.netl.doe.gov/smartgriddemos

- **Competitive, merit-based solicitation; several hundred proposals expected**
- **Covers electric transmission, distribution, and customer-side projects at a scale that can be replicated across the country**
- **Scope includes (1) Regional smart grid demonstrations, (2) Energy storage demonstrations, (3) Synchrophasor demonstrations**

Eligibility and Funding

- Expect applications from all types of organizations including state and local agencies, universities, electric utilities, equipment manufacturers, and project developers
- Other Federal agencies, certain non-profits that engaged in lobbying activities after December 31, 1995 are NOT eligible
- Approximately \$615,000,000 in Federal funds available
- Applicant's cost share must be at least 50% of the total allowable costs
- Expect to fund: 8-12 regional demonstrations, 12-19 energy storage projects, and 4-5 synchrophasor projects

Anticipated Schedule

Activity	Date
Draft Funding Opportunity Announcement (FOA)	April 16, 2009
Funding Opportunity Announcement	After 20 day comment period June, 2009
Project Awards	December, 2009



DOE Support for Transmission Analysis and Planning

- **Even with stronger energy efficiency programs, large amounts of new generation capacity will be needed in the next two decades.**
- **Much of this generation will be remote from load centers and in areas where existing transmission capacity is limited.**
- **To achieve our objectives of reducing carbon emissions and displacing petroleum fuels from the transportation sector, we need to build much stronger transmission networks.**





Need for Interconnection-Level Planning Studies is Critical

- **Needed:** A body of analysis that identifies new or greatly-upgraded lines required under a wide range of potential futures.
- **Analyses must be transparent, and produced through collaboration among industry experts and representatives from states, federal agencies, and key NGOs.**
- **Collaboration is essential to achieving results that key stakeholders will regard as objective and sufficient.**



Competitive Process

- **Within each interconnection, DOE expects to select a single recipient for funding through a competitive process.**
- **DOE must commit ARRA funds to recipients no later than September 30, 2010. Recipients will have until September 30, 2014 to spend the money.**
- **Cost-sharing: DOE expects recipients will obtain a substantial fraction of the total cost of the studies from industry sources.**



Transmission Analysis and Planning Support

Contact Information

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Advanced SynchroPhasor Research Projects

- The National Energy Technology Laboratory (NETL) Funding Opportunity Announcement (FOA) entitled “Advanced SynchroPhasor Research” closed May 27, 2009
- The FOA provides financial assistance for innovative applied research and development on the use of synchrophasor data for improving the reliability of electricity delivery
- Each project is a multi-year program using a phased approach –
 - Phase 1 - analytical (theoretical) studies,
 - Phase 2 - pilot or prototype studies
 - Phase 3 - large-scale demonstration with a utility partner
- Applications must propose analysis studies and demonstration of technologies that would improve electricity reliability and market efficiency using data exchange among utilities



Advanced SynchroPhasor Research Projects

- Types of applications may include, but are not limited to:
 - Monitoring and visualization for improved control room operations
 - Wide-area control and protection
 - Power system restoration
 - Improved wholesale market efficiency
- The minimum cost share required for Phases 1 and 2 is 20%; Phase 3 is 50%.
- DOE envisions awarding 2-3 cost-share cooperative agreements
- The estimated period of performance for each award is two to three years with anticipated total Federal funding over 3 years is \$1.8 million
- National Laboratories will not be permitted to participate as the prime recipient or subcontractor



For More Information

Office of Electricity Delivery and Energy Reliability's Website

www.OE.energy.gov

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NATIONAL CORRIDORS
U.S. Department of Energy (DOE) Secretary Samuel W. Bodman announced the issuance of two draft National Interest Electric Transmission Corridor (National Corridor) designations. To view the press release. [Go>](#)

NATIONAL ACTION PLAN FOR ENERGY EFFICIENCY
Utility sector leaders make firm commitment to energy efficiency through a National Action Plan for Energy Efficiency, facilitated by DOE and EPA. For more information. [Go>](#)

EMERGENCY PETITIONS & COMPLAINTS
See the latest posting regarding Emergency Petitions and Complaints; D.C. Public Service Commission. [Go>](#)

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Kevin Kolevar at Energy Louisiana's Operations Center
Office of Electricity Delivery and Energy Reliability

"DEPARTMENT OF ENERGY OFFICIAL TOUTS BUSH ADMINISTRATION'S EFFORTS TO MODERNIZE OUR NATION'S ELECTRIC GRID"
The U.S. Department of Energy's (DOE) newly confirmed Assistant Secretary for the Office of Electricity Delivery and Energy Reliability Kevin M. Kolevar today highlighted the Bush Administration's efforts to increase the use of new power delivery system equipment in New Orleans, as well as DOE's recent announcement to invest up to \$51.8 million to modernize and secure our nation's electric grid.
For more information and to view the press release [Go>](#)

"DOE PROVIDES UP TO \$51.8 MILLION TO MODERNIZE THE U.S. ELECTRIC GRID SYSTEM"
U.S. Department of Energy (DOE) Secretary Samuel W. Bodman announced that DOE will provide up to \$51.8 million for