RECOVERY ACT AWARDS FOR SMART GRID DEMONSTRATION PROJECTS
Projects are implemented by teams of organizations, including utilities, private companies, universities, governmental groups, etc. The lead organization for each project is listed below.

American Superconductor Corporation – Development and In-Grid Demonstration of a Transmission Voltage SuperLimiterTM Fault Current Limiter
(Westborough, MA) - $4,832,972

- American Superconductor is developing and demonstrating advanced technology for a fault current limiter, which will restrict power surges through equipment in fault conditions such as a short circuit, maintaining power quality and grid stability.

American Superconductor Corporation – High Temperature Superconductor Transmission Cable System for Installation in the Long Island Power Grid (LIPA 2)
(Westborough, MA) - $7,584,120

- American Superconductor Corporation is also developing the key components required to commercially deploy second-generation, high-temperature superconductor cables that will increase the reliability and efficiency of power delivery cables. The company will also use Recovery Act funding to demonstrate a prototype cable in the Long Island Power Authority power grid.

City of Fort Collins – Research Development and Demonstration of Peak Load Reduction on Distribution Feeders Using Distributed Energy Resources for the City of Fort Collins
(Fort Collins, CO) - $4,841,647

- The city of Fort Collins, in cooperation with a number of partners in the state, will research, develop and demonstrate a coordinated and integrated system of mixed clean energy technologies and distributed energy resources. This will enable the city to reduce peak load electricity demand by at least 15 percent at distribution feeders and allow for expanded use of renewables.

Consolidated Edison Company of New York – Interoperability of Demand Response Resources Demonstration in New York
(New York City, NY) - $5,631,110

- Consolidated Edison will develop and demonstrate true interoperability between an energy delivery company and retail electric consumers. By using demand response resources, the project will enhance the reliability of the distribution grid and the efficiency of its operations.

Illinois Institute of Technology (IIT) – The Perfect Power Prototype for the Illinois Institute of Technology
(Chicago, IL) - $5,405,583

- IIT will develop and demonstrate a system that will achieve "perfect power" at the main campus of ITT, which will always meet the needs of the individual end-user. Different end users have different needs, so a perfect power system focuses on flexibility and adaptability that can accommodate every user. The system will focus on implementing distributed resources and creating demand-responsive microgrids to increase reliability and decrease overall energy demand. The project aims to replicate its efforts with other municipality-sized energy systems.

University of Hawaii at Manoa-Hawaii Natural Energy Institute – A Dispatchable Distribution Feeder for Peak Load Reduction and Wind Farming
(Honolulu, HI) - $5,548,585

- The University of Hawaii will explore the management of distribution system resources for improved service quality and reliability, transmission congestion relief, and grid support functions.

University of Nevada – Las Vegas – Dramatic Residential Demand Reduction in the Desert Southwest
(Las Vegas, NV) - $5,724,709

- The University of Nevada-Las Vegas will explore technologies to apply distributed generation and detailed energy accounting and control for a large residential development in the southwestern U.S., with the goal of significantly reducing residential electrical demand. This community of green homes will provide a laboratory atmosphere that will be used to apply cost benefit analysis and research various energy-conserving design approaches.

Zenergy Power Inc. – Design, Test & Demonstration of Saturable Reactor High Temperature Superconducting Fault Current Limiters
(San Francisco, CA) - $8,081,973

- Zenergy Power will design, test, and demonstrate an advanced technology for a fault current limiter for use on the transmission system. The goal of the fault current limiter is the same as the American Superconductor technology – restricting power surges in fault conditions such as a short circuit and maintaining power quality and grid stability – but uses a different type of technology to limit the flow of the current.

Source: U.S. Dept. of Energy