

SMART GRID INVESTMENT GRANT TOPIC AREAS

i. Equipment Manufacturing

Project applications in this topic area will be aimed at the production or purchase of smart grid systems, equipment, devices, software, or communications and control systems for modifying existing electric system equipment; building, office, commercial, or industrial equipment; consumer products and appliances; or distributed generation, demand response, or energy storage devices to enable the smart grid functions.

ii. Customer Systems

Project applications in this topic area will be aimed at enabling the smart grid functions in buildings, facilities, and appliances and equipment on the customer-side-of-the-meter. Projects will primarily involve adding smart grid functions to equipment and/or software applications including but not necessarily limited to “smart” appliances and equipment, home area networks, building or facility management systems, distributed energy systems, demand response equipment, load control systems for lowering peak demand, energy storage devices, plug-in hybrid electric vehicles, and microgrids.

iii. Advanced Metering Infrastructure

Project applications in this topic area will be aimed at the installation of smart meters that can facilitate two-way communication between consumers and utilities. Smart meters are able to measure, store, send and receive real time digital information concerning electricity use, costs and prices, that can be used to implement a range of customer service initiatives including dynamic pricing, demand response, load management, billing, remote connect/disconnect, outage detection and management, tamper detection, and other programs.

iv. Electric Distribution Systems

Project applications in this topic area will be aimed at adding smart grid functions to local electric distribution systems in retail electricity markets. Projects will primarily involve adding smart grid functions to devices, equipment, and/or software applications including substations, transformer banks, feeder lines, pole top transformers, and customer interconnection and communications systems. Projects in this area can involve distribution automation systems; Supervisory Control and Data Acquisition (SCADA) systems; distribution monitoring, control, and optimization systems; load control systems for lowering peak demand; and electric distribution applications of distributed generation and energy storage equipment.

v. Electric Transmission Systems

Project applications in this topic area will be aimed at adding smart grid functions to the electric transmission systems in bulk power markets that typically involve power delivery over long distances including multi-state regions. Projects will primarily involve adding smart grid functions to devices, equipment, and/or software applications such as phasor measurement units,

phasor data concentrators, and visualization tools that use phasor or other data; other types of remote sensing, monitoring, data acquisition and retrieval equipment; planning and control room applications; advanced communications and interconnection systems; and retrofit of electric transmission systems with smart grid functions and capabilities.

vi. Integrated and/or Crosscutting Systems

Project applications in this topic area will be aimed at adding smart grid functions to multiple portions of the electric system or integrating multiple smart grid capabilities. Projects in this topic area will tend to be large and involve equipment and/or software applications that cover two or more of the topic areas including: Advanced Metering Infrastructure and Electric Distribution Systems; Customer Systems and Advanced Metering Infrastructure; or Electric Transmission Systems and Electric Distribution Systems.