



U.S. DEPARTMENT OF ENERGY

News Media Contact(s):
(202) 586-4940

For Immediate Release
October 27, 2009

President Obama Announces \$3.4 Billion Investment to Spur Transition to Smart Energy Grid

Applicants say investments will create tens of thousands of jobs, save energy and empower consumers to cut their electric bills

ARCADIA, FLORIDA – Speaking at Florida Power and Light’s (FPL) DeSoto Next Generation Solar Energy Center, President Barack Obama today announced the largest single energy grid modernization investment in U.S. history, funding a broad range of technologies that will spur the nation’s transition to a smarter, stronger, more efficient and reliable electric system. The end result will promote energy-saving choices for consumers, increase efficiency, and foster the growth of renewable energy sources like wind and solar.

The \$3.4 billion in grant awards are part of the American Reinvestment and Recovery Act, and will be matched by industry funding for a total public-private investment worth over \$8 billion. Applicants state that the projects will create tens of thousands of jobs, and consumers in 49 states will benefit from these investments in a stronger, more reliable grid. Full listings of the grant awards by category and state are available [HERE](#) and [HERE](#). A map of the awards is available [HERE](#).

An analysis by the Electric Power Research Institute estimates that the implementation of smart grid technologies could reduce electricity use by more than 4 percent by 2030. That would mean a savings of \$20.4 billion for businesses and consumers around the country, and \$1.6 billion for Florida alone -- or \$56 in utility savings for every man, woman and child in Florida.

One-hundred private companies, utilities, manufacturers, cities and other partners received the Smart Grid Investment Grant awards today, including FPL, which will use its \$200 million in funding to install over 2.5 million smart meters and other technologies that will cut energy costs for its customers. In the coming days, Cabinet Members and Administration officials will fan out to awardee sites across the country to discuss how this investment will create jobs, improve the reliability and efficiency of the electrical grid, and help bring clean energy sources from high-production states to those with less renewable generating capacity. The awards announced today represent the largest group of Recovery Act awards ever made in a single day and the largest batch of Recovery Act clean energy grant awards to-date.

Today's announcement includes:

- **Empowering Consumers to Save Energy and Cut Utility Bills -- \$1 billion.** These investments will create the infrastructure and expand access to smart meters and customer systems so that consumers will be able to access dynamic pricing information and have the ability to save money by programming smart appliances and equipment to run when rates are lowest. This will help reduce energy bills for everyone by helping drive down “peak demand” and limiting the need for “stand-by” power plants – the most expensive power generation there is.
- **Making Electricity Distribution and Transmission More Efficient -- \$400 million.** The Administration is funding several grid modernization projects across the country that will significantly reduce the amount of power that is wasted from the time it is produced at a power plant to the time it gets to your house. By deploying digital monitoring devices and increasing grid automation, these awards will increase the efficiency, reliability and security of the system, and will help link up renewable energy resources with the electric grid. This will make it easier for a wind farm in Montana to instantaneously pick up the slack when the wind stops blowing in Missouri or a cloud rolls over a solar array in Arizona.
- **Integrating and Crosscutting Across Different “Smart” Components of a Smart Grid -- \$2 billion.** Much like electronic banking, the Smart Grid is not the sum total of its components but how those components work together. The Administration is funding a range of projects that will incorporate these various components into one system or cut across various project areas – including smart meters, smart thermostats and appliances, synchrophasors, automated substations, plug in hybrid electric vehicles, renewable energy sources, etc.
- **Building a Smart Grid Manufacturing Industry -- \$25 million.** These investments will help expand our manufacturing base of companies that can produce the smart meters, smart appliances, synchrophasors, smart transformers, and other components for smart grid systems in the United States and around the world – representing a significant and growing export opportunity for our country and new jobs for American workers.

The combined effect of the investments announced today, when the projects are fully implemented, will:

- Create tens of thousands of jobs across the country. These jobs include high paying career opportunities for smart meter manufacturing workers; engineering technicians, electricians and equipment installers; IT system designers and cyber security specialists; data entry clerks and database administrators; business and power system analysts; and others.
- Leverage more than \$4.7 billion in private investment to match the federal investment.
- Make the grid more reliable, reducing power outages that cost American consumers \$150 billion a year -- about \$500 for every man, woman and child in the United States.
- Install more than 850 sensors - called ‘Phasor Measurement Units’ - that will cover 100 percent of the U.S. electric grid and make it possible for grid operators to better monitor grid conditions and prevent minor disturbances in the electrical system from cascading into local or regional power outages or blackouts. This monitoring ability will also help the grid to incorporate large blocks of intermittent renewable energy, like wind and solar power, to take advantage of clean

energy resources when they are available and make adjustments when they're not.

- Install more than 200,000 smart transformers that will make it possible for power companies to replace units before they fail thus saving money and reducing power outages.
- Install almost 700 automated substations, representing about 5 percent of the nation's total that will make it possible for power companies to respond faster and more effectively to restore service when bad weather knocks down power lines or causes electricity disruptions.
- Power companies today typically do not know there has been a power outage until a customer calls to report it. With these smart grid devices, power companies will have the tools they need for better outage prevention and faster response to make repairs when outages do occur.
- Empower consumers to cut their electricity bills. The Recovery Act combined with private investment will put us on pace to deploy more than 40 million smart meters in American homes and businesses over the next few years that will help consumers cut their utility bills.
- Install more than 1 million in-home displays, 170,000 smart thermostats, and 175,000 other load control devices to enable consumers to reduce their energy use. Funding will also help expand the market for smart washers, dryers, and dishwashers, so that American consumers can further control their energy use and lower their electricity bills.
- Put us on a path to get 20 percent or more of our energy from renewable sources by 2020.
- Reduce peak electricity demand by more than 1400 MW, which is the equivalent of several larger power plants and can save ratepayers more than \$1.5 billion in capital costs and help lower utility bills. Since peak electricity is the most expensive energy – and requires the use of standby power generation plants – the economic and environmental savings for even a small reduction are significant. In fact, some of the power plants for meeting peak demand operate for only a few hundred hours a year, which means the power they generate can be 5-10 times more expensive than the average price per kilowatt hour paid by most consumers.

U.S. Department of Energy, Office of Public Affairs, Washington, D.C.