

Florida electric utility completes smartgrid installations

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(Phys.org) —Florida Power & Lighting has completed its \$800 million smart grid upgrade, with installations of 4.5 million smart meters. Smart meters are digital devices that use radio frequencies to communicate with automated feeder switches and other devices on poles and power lines. The meters can measure a building's use of electricity. FPL installed 4.5 million smart meters alongside more than 10,000 sensors. FPL says the benefit to customers is that by installing the smart meters

each customer can get on the Internet to see the power being used by the hour, day, and month. The customer can also see bill estimates based on current usage patterns. FPL believes more information can lead to customers making more informed choices about usage and costs. Overall, a smart grid can automatically sense and gather data about consumer habits.

The power company advantage is that it can improve systems before serious problems surface. The company believes its project will realize real value in fewer outages and lower electric bills for customers. So far, 400 malfunctioning transformers were sensed before they caused a power outage, said FPL, and smart meters allowed the power company to solve smaller problems without having to send out crews.

The ongoing success of Florida's [smart grid](#) in improving efficiencies and reducing outages will be worth tracking in light of how the FPL implementation might motivate improvements elsewhere in the U.S., according to energy watchers. The prevailing attitude is that, saddled with aging architectures, the way to avoid power outages is through monitoring a smartgrid to stem problems from getting out of hand. The Florida effort is being applauded because of the large scale of the FPL's grid.

Commenting on the meters and other devices used, SmartGridNews.com observed how all that equipment is [networked](#) and "sending data back to the utility, data that can be used to identify problems before they cause an outage – and reduce the length and area affected if outages do happen."

Said FPL President Eric Silagy, "While no electric system can be fully stormproof, and we have been working to strengthen the grid and improve its resiliency for some time, the acceleration of this effort will help us get businesses up and running and residents' lives back to normal

more quickly after storms."

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