

University of Washington Selected as Test Site for NW Smart Grid Demo

The University of Washington will be part of a team that will conduct a regional smart energy grid demonstration project. The \$178 million project, funded by the U.S. Dept. of Energy and managed by Battelle, will include a demonstration test site on the UW campus in Seattle.

The overall goal of the project is to reduce energy costs for consumers, to make the energy grid stronger and more reliable, and to increase accessibility to clean-low-cost renewable energy sources for homes and businesses.

The UW Smart Grid Project will include the installation of meters and equipment that will measure energy consumption at two UW residence halls and two academic or research buildings. The \$9 million project also will allow the UW to standardize and modernize the campus building energy management infrastructure by upgrading electrical building meters to smart meters in as many as 200 buildings. These building systems will be tied together to provide a common platform for managing energy consumption.

The university will be installing software that will test the feasibility of integrating management of the university's central boilers, chillers and electrical generators into a campus-wide smart grid metering network.

"This will be a wonderful test vehicle for our researchers to investigate the deployment of smart-grid technologies," said Matthew O'Donnell, Dean of the UW's College of Engineering. "Having users on campus will allow us to do rapid-cycle testing of important concepts related to user interface and cyber-security. UW students will be actively involved in the project, testing some of the devices and their ability to help the university conserve energy. For the first time, there will be fuel gauges on energy consumption in residence halls, giving students some control over that consumption."

"This is an exceptional opportunity for our faculty and students to engage smart grid technology through research and practical application," says UW President Mark Emmert. "It's yet another instance of the University being among the nation's leaders in our environmental stewardship and sustainability efforts. It is right up our alley."

The Department of Energy, through the American Recovery and Reinvestment Act, has awarded \$3.4 billion in grants to help fund the largest single energy grid modernization in US history.