May 31, 2013

Portland General Electric Opens Salem Smart Power Center along with Project Partners and State of Oregon

New facility gives visitors an unprecedented view of smart grid demonstration project

PORTLAND, Ore.--(BUSINESS WIRE)-- The future arrived in Oregon today with the opening of Portland General Electric's (NYSE: POR) new Salem Smart Power Center, an 8,000-square-foot facility in Salem, Ore., that offers a unique insider's view of a working smart grid demonstration project.

Portland General Electric's Salem Smart Power Center includes a large-scale energy storage system. (Photo: Business Wire)

Outfitted with a large-scale energy storage system, the center is designed to help PGE test how to store and better integrate variable renewable energy sources like solar and wind into the electrical grid, along with several other smart technologies as part of its Salem Smart Power Project. The technologies work together to create a highly reliable "micro-grid" that serves about 500 business and residential customers in southeast Salem. An onsite visitor center offers educational exhibits about the project and smart grid. Watch PGE's Salem Smart Power video.

PGE collaborated with Eaton and EnerDel, Inc. on the $23 million Salem Smart Power Project. The project received U.S. Department of Energy matching funds as part of the largest regional smart grid demonstration project in the nation — the Pacific Northwest Smart Grid Demonstration Project (PNW-SGDP).

"Together with our project partners and customers, we are demonstrating smart grid technologies to help Oregon and the nation learn how to build intelligent energy resources for the future while continuing to deliver long-term value for customers," said Jim Piro, PGE president and CEO. "We are proud of the collaboration, hard work and ingenuity that went into this project, and thank our Salem customers who volunteered to participate in this important study."

"Increasing renewables, reliability and storage moves our country toward a low-carbon, more sustainable energy future," said Senator Ron Wyden of Oregon, chairman of the U.S. Senate Energy and Natural Resources Committee. "This Smart Power Center and the Pacific Northwest Smart Grid Demonstration Project show that when it comes to energy innovation, Oregon takes a back seat to no one."

The PGE project will test energy storage, dispatchable standby generation, remotely operated power line switches, demand response, renewable energy integration and transactive control.

PGE worked with EnerDel to outfit the center with their 5-megawatt, lithium-ion battery system, and Eaton to provide engineering expertise and two-way inverters to manage and operate the energy storage system. The energy storage system works with state of Oregon standby generators to create a high-reliability zone to reduce service interruptions for PGE customers. The Oregon State Data Center, Oregon Military Department and the Anderson Readiness Center are participating.

"Oregon is already a national leader in energy efficiency with rich opportunities to boost locally produced renewable energy and clean energy infrastructure," said Oregon Governor John Kitzhaber. "It seems only fitting we help lead a future that not only powers our homes and businesses in the most efficient way, but also the smartest."

Salem-based Kettle Brand, pioneer of the kettle-cooked potato chip and industry leader in sustainability, is connecting its 616-panel rooftop solar installation to the project to help test storage and bring solar energy into the grid when it's needed most.

To test demand-response technologies, PGE business customers are volunteering to cycle their heating, cooling and other systems on and off throughout the day or shift their use to off-peak. In addition, residential customers are letting PGE automatically cycle their water heaters on and off for brief periods throughout the day.

PGE also will be the first Northwest utility to test its own Smart Power[SM] software, which brings power generating resources online at the optimal time to ensure customers receive the most benefit at the least cost. It also works with transactive control technology being used in the PNW-SGDP that communicates the cost of delivering energy through the power system. For example, PGE will store energy at the center when energy market prices are low, and pull from energy storage, rather than buying power, when market prices are high.

The Salem Smart Power Project is part of the five-year PNW-SGDP, which is managed by Battelle, and involves more than 60,000 customers, 11 utilities, the Bonneville Power Administration and several technology participants in Idaho, Montana, Oregon, Washington, and Wyoming. In the next two years, PGE will provide data to PNW-SGDP as one of the project's 13 test sites that represent the region's diverse terrain, weather and demographics.

About Portland General Electric Company

Portland General Electric, headquartered in Portland, is a fully integrated electric utility that serves approximately 830,000 residential, commercial and industrial customers in Oregon. To learn more about PGE's smart grid programs, visit www.PortlandGeneral.com/SmartGrid.

Photos/Multimedia Gallery Available: http://www.businesswire.com/multimedia/home/20130531005504/en/

PGE
Elaina Medina, 503-464-8790

Source: Portland General Electric Company