PGE program will transform hundreds of homes into a virtual power plant

July 1, 2020

Oregon Public Utility Commission gives residential battery storage pilot a green light

PORTLAND, Ore., July 1, 2020 /PRNewswire/ -- Portland General Electric Company (NYSE: POR) is set to launch a pilot program that will incentivize installation and connection of 525 residential energy storage batteries that PGE will dispatch, contributing up to four megawatts of energy to PGE's grid. The distributed assets will create a virtual power plant made up of small units that can be operated individually or combined to serve the grid, adding flexibility that supports PGE's transition to a clean energy future. When the program launches this fall, incentives will be available to residential customers across PGE's service area. Rebates will be available to customers within three neighborhoods participating in PGE's Smart Grid Test Bed, and income-qualified customers participating in Energy Trust of Oregon's Solar Within Reach offer.

PGE will study the full benefits that these distributed energy assets can provide the grid while also increasing resiliency for each participating customer. PGE will operate and test the benefits of using homes' batteries, each capable of storing 12 to 16 kWh of energy, to optimize the use of renewable energy and grid capabilities. In the event of a power outage, participating customers can rely on them as a backup power resource.

"Our vision for clean energy relies on a smart, integrated grid. One of the ways that we'll achieve that is through creative partnerships and diversified energy resources, including those behind-the-meter," said Larry Bekkedahl, vice president of Grid Architecture, Integration and Systems Operation. "This pilot project will allow PGE to integrate even more intermittent renewable energy and enhance grid capabilities while also giving participating customers peace of mind in the event of an outage."

Energy storage maximizes renewables and the grid, improves power quality

Energy storage is vital to help capture and store energy from renewable power sources, such as wind and solar, that are more variable. As a virtual power plant, the residential battery storage pilot will create a single resource that can help the grid balance energy production with energy demand, freeing up the generation resources that are typically held on standby, ready to kick in when the wind doesn't blow or the sun doesn't shine. As a clean energy option that takes the place of standby resources, the virtual power plant also gives customers access to reliable energy, even in the event of system outages.

The test program will also allow PGE to test new smart-grid control devices across its distribution system that will more effectively allow a two-way exchange between PGE and pilot participants. The new controls will more actively manage the way that electricity is distributed across PGE's system to incorporate energy that customers generate, such as through solar panels, while also meeting power demand that is less predictable, such as for charging electric vehicles. The controls will allow PGE to more actively manage power distribution to improve power quality for all customers.

Select rebates and incentives will be available to participants

When it launches in fall 2020, participation in the program will be available to residential customers, including:

- Those across PGE's service area who already have or are installing a qualifying battery. Participation will require an application, and in exchange for allowing PGE to operate their battery for grid services, participating customers will receive a monthly bill credit of $40, or $20 if the battery is charged with solar power;
- Customers across PGE's service area who are participating in the Solar Within Reach offering from Energy Trust of Oregon. Participants will be eligible for a $5,000 instant rebate in addition to the monthly bill credits; and
- Those living within the PGE Smart Grid Test Bed who purchase a battery will be eligible for an instant rebate, in addition to the monthly bill credit of $40 or $20, which will allow PGE to test the localized grid impact of having a large concentration of battery storage devices available on one substation.

PGE is working with Energy Trust to cost-effectively procure the residential battery storage systems by leveraging the existing solar incentive program infrastructure and trade ally contractor network. Customers who participate in the program will own their battery systems, and rebates will only be available for systems installed by an Energy Trust solar trade ally. The program may also accept customers with a qualifying battery that is was previously installed, following a process to ensure safe operation.

More information about Portland General Electric's energy storage program is available at PortlandGeneral.com/energystorage and will be updated with details about the residential battery storage pilot program.

About Portland General Electric Company: Portland General Electric (NYSE: POR) is a fully integrated energy company based in Portland, Oregon, with operations across the state. The company serves 899,000 customers with a service area population of 1.9 million Oregonians in 51

cities. PGE has 16 generation plants in five Oregon counties, and maintains and operates 14 public parks and recreation areas. For over 130 years, PGE has delivered safe, affordable and reliable energy to Oregonians. Together with its customers, PGE has the No. 1 voluntary renewable energy program in the U.S. PGE and its 3,000 employees are working with customers to build a clean energy future. In 2019, PGE, employees, retirees and the PGE Foundation donated $4.7 million and volunteered 32,900 hours with more than 700 nonprofits annually across Oregon. For more information visit portlandgeneral.com/cleanvision.

Safe Harbor Statement

Statements in this news release that relate to future plans, objectives, expectations, performance, events and the like may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements regarding earnings guidance; statements regarding future load, hydro conditions and operating and maintenance costs; statements concerning implementation of the company's integrated resource plan; statements concerning future compliance with regulations limiting emissions from generation facilities and the costs to achieve such compliance; as well as other statements containing words such as "anticipates," "believes," "intends," "estimates," "promises," "expects," "should," "conditioned upon," and similar expressions. Investors are cautioned that any such forward-looking statements are subject to risks and uncertainties, including reductions in demand for electricity; the sale of excess energy during periods of low demand or low wholesale market prices; operational risks relating to the company's generation facilities, including hydro conditions, wind conditions, disruption of fuel supply, and unscheduled plant outages, which may result in unanticipated operating, maintenance and repair costs, as well as replacement power costs; failure to complete capital projects on schedule or within budget, or the abandonment of capital projects, which could result in the company's inability to recover project costs; the costs of compliance with environmental laws and regulations, including those that govern emissions from thermal power plants; changes in weather, hydroelectric and energy markets conditions, which could affect the availability and cost of purchased power and fuel; changes in capital market conditions, which could affect the availability and cost of capital and result in delay or cancellation of capital projects; the outcome of various legal and regulatory proceedings; general economic and financial market conditions; severe weather conditions, wildfires, and other natural phenomena and natural disasters that could result in operational disruptions, unanticipated restoration costs, or liability for third party property damage; and cyber security breaches of the company's customer information system or operating systems, which may affect customer bills or other aspects of our operations. As a result, actual results may differ materially from those projected in the forward-looking statements. All forward-looking statements included in this news release are based on information available to the company on the date hereof and such statements speak only as of the date hereof. The company expressly disclaims any current intention to update publicly any forward-looking statement after the distribution of this release, whether as a result of new information, future events, changes in assumptions or otherwise. Prospective investors should also review the risks, assumptions and uncertainties listed in the company's most recent annual report on form 10-K and in other documents that we file with the United States Securities and Exchange Commission, including management's discussion and analysis of financial condition and results of operations and the risks described therein from time to time.

Source: Portland General Company

Media Contact:

Andrea Platt
503-464-7908
Andrea.Platt@pgn.com

View original content:http://www.prnewswire.com/news-releases/pge-program-will-transform-hundreds-of-homes-into-a-virtual-power-plant-301086514.html

SOURCE Portland General Company