Wheatridge Renewable Energy Facility

Wheatridge Renewable Energy Facility will be the first major renewable energy project in North America to co-locate wind, solar and battery storage.

About Portland General Electric Company

» A fully-integrated energy company based in Portland, Oregon, with 130 years' experience delivering safe, affordable and reliable energy to customers – currently more than 885,000 in 51 cities
» PGE has had the No.1 voluntary renewable energy program in the U.S. for the past nine years, with more than 200,000 customers now enrolled
» Once the Wheatridge project is online, PGE will have 1,000 megawatts of owned and contracted wind energy from five Northwest wind farms available to serve customers.
» PGE is working to dramatically increase its renewable energy portfolio while reducing greenhouse gas emissions to meet Oregon’s climate goals and help drive the state’s transition to a clean energy economy

PortlandGeneral.com/CleanVision

Wind Overview

» Located in Morrow County, Oregon
» Expected maximum capacity of 300 megawatts produced by approximately 120 GE turbines
» Each turbine will be up to 90 meters tall from the ground to the hub in the center of the blades
» Expected to begin commercial operation in 2020
» 200 megawatts owned and operated by a subsidiary of NextEra Energy Resources, LLC
» 100 megawatts owned by Portland General Electric Company

Wind Benefits

» Creates up to 10 full time operations jobs
» Creates up to 300 construction jobs
» Adds property taxes benefiting schools and local services
» Supports economy through purchases of regional goods and services
» Provides landowner payments
» Increased local spending for goods and services during construction
» Allows land to remain in agricultural use
» Creates no air or water pollution
» Uses no water in power generation
About NextEra Energy Resources, LLC

» A leading clean energy provider operating wind, natural gas, solar and nuclear power plants
» A portfolio of power generating facilities across the United States and in Canada
» The world’s largest generator of wind and solar energy
» A subsidiary of NextEra Energy, Inc., with headquarters in Juno Beach, Florida
» Approximately 99 percent of the electricity we generate comes from clean or renewable sources

NextEraEnergyResources.com

Solar and Storage Overview

» A 50-megawatt photovoltaic solar energy generating facility
» A battery facility will charge using energy from the solar field and provide 30 megawatts of continuous power for 4 hours
» Expected to begin commercial operation in 2021
» Owned and operated by a subsidiary of NextEra Energy Resources, LLC

Solar Benefits

» Delivers safe, low-cost, clean renewable energy
» Creates up to 175 construction jobs
» Adds property taxes benefiting schools and local services
» Creates no air or water pollution
» Uses no water to generate electricity

Energy Storage Benefits

» Allows energy to be delivered instantly to grid operators
» Can help balance the load on the power grid by moving energy when demands are low to times when demands are high
» Helps to bridge inefficiencies in the supply and demand of electricity

How the Wheatridge Renewable Energy Facility will work

As sunlight hits the solar panels, the photovoltaic energy is converted into direct current electricity (DC). The direct current flows from the panels through inverters and is converted into alternating current (AC). From the inverter, some of the emissions-free energy goes into a battery system to be stored for use at a later time while the rest of the energy travels through the power grid for delivery to homes and businesses.