Weatherford Wind Energy Center
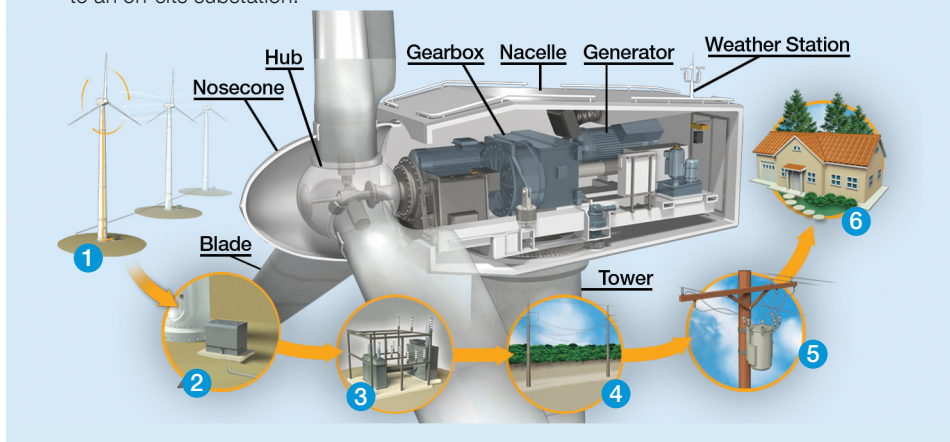

About NextEra Energy Resources

» A leading clean energy provider operating wind, natural gas, solar and nuclear power plants

» A portfolio of generating assets across the United States and in Canada

» The largest wind generator in North America

» A subsidiary of NextEra Energy, Inc., with headquarters in Juno Beach, Florida

» More than 95 percent of our electricity comes from clean or renewable sources

» Visit us at www.NextEraEnergyResources.com

How a wind turbine works

1 A computer turns the nacelle and the rotor (which consists of three blades and a hub) to face into the wind. The turbine blades turn a generator to produce electricity. For safety purposes, the turbine shuts down automatically if the wind speed exceeds 55 miles per hour.

2 The electricity travels down the inside of the tower through electrical cables to a transformer at the base of the wind tower.

3 From the transformer, the electricity flows through an underground collection cable to an on-site substation.

4 From the substation, overhead electrical cables take the electricity to an off-site substation and into high-voltage transmission lines.

5 The electricity goes from the high-voltage transmission lines into local distribution lines.

6 The electricity is then distributed to homes, schools, businesses and other consumers.

Overview
» Located in Custer and Washita counties, Oklahoma
» Operated by a subsidiary of NextEra Energy Resources
» A 147-megawatt wind generation plant
» 98 1.5-megawatt GE turbines that are capable of generating enough electricity to power more than 44,000 homes
» Each wind turbine is approximately 262 feet tall from the ground to the hub in the center of the blades
» Began commercial operation in 2005

Benefits
» Provides employment opportunities
» Adds tax base to the counties
» Delivers landowner lease payments
» Creates no air or water pollution
» Uses no water in power generation
» Allows land to remain in agricultural use
» Supports economy through purchases of regional goods and services