

Kay Wind Facility



Location
KAY COUNTY,
OKLAHOMA

Capacity
299 MEGAWATTS

Fuel Resource
WIND TURBINE

Ownership
SOUTHERN POWER



Southern Power, a subsidiary of Southern Company, is a leading U.S. wholesale energy provider meeting the electricity needs of municipalities, electric cooperatives and investor-owned utilities. Southern Power and its subsidiaries own or have rights to 35 facilities operating or under construction in nine states with more than 10,500 MW of generating capacity in Alabama, California, Florida, Georgia, Nevada, New Mexico, North Carolina, Oklahoma and Texas.

Atlanta-based Southern Company is the premier energy company serving the Southeast, through its subsidiaries, and a leading U.S. producer of clean, safe, reliable and affordable electricity. With more than 4.5 million customers and approximately 46,000 megawatts of generating capacity, Southern Company owns electric utilities in four states and a growing competitive generation company, as well as fiber optics and wireless communications.

Southern Power announced an agreement to acquire the 299-megawatt (MW) Kay Wind facility in early 2015. The facility entered into service December 2015.

The electricity and associated renewable energy credits (RECs) generated by the facility are being sold under 20-year power purchase agreements with Westar Energy, Inc. in Kansas and Grand River Dam Authority (GRDA) in Oklahoma. Westar Energy, Inc. has contracted for approximately 199 MW and GRDA has contracted for approximately 100 MW. Both companies will have the option to either keep or sell the RECs.

Technology

Located in Kay County, Oklahoma, the project utilizes 130 wind turbines manufactured by Siemens Energy, Inc.

Each turbine is mounted on top of an 80-meter-tall tower and has a 108-meter, three-blade rotor connected to a generator. The AC power from the generator is modulated at 60 hz by a converter. Multiple wind turbines are electrically connected in parallel to the main power transformer where the energy converted to the prescribed interconnection voltage.