

POWER UP WITH WIND.



HAPPY JACK WINDPOWER, CHEYENNE, WYOMING



Wind power is a clean, cost effective, inexhaustible and readily available renewable energy resource.

At Duke Energy we understand the important role that renewable energy can play in improving efficiency, reliability and sustainability. We are constantly seeking to lessen our impact on the environment and to make certain we are prepared to meet your energy needs in years to come. In support of our strategy to increase investment in renewable energy and national efforts to reduce carbon emissions, we are adding wind power to our generation portfolio.

“As our nation’s appetite for electricity continues to grow, renewable energy will play a larger role in meeting that demand,” said Duke Energy Chairman, President and CEO, James E. Rogers. “Wind energy supports our strategy to increase our investment in renewable energy and national efforts to reduce carbon emissions.”

Who are we?

Duke Energy is one of the largest electric power companies in the United States supplying and delivering energy to approximately 4 million customers. We have over 36,000 megawatts of electric generating capacity throughout the U.S., and more than 4,000 megawatts of electric generation in Latin America.

Wind Power Development

Duke Energy entered the wind energy industry in 2007 with the acquisition of Tierra Energy’s wind development business. Skilled in project development, engineering, construction, asset management, and operations, we have the experience to tackle the toughest wind energy challenges. Duke Energy is proud to be a member of the American Wind Energy Association.

Happy Jack Windpower Facts:

Site Generation Capacity	29.4 MW
Number of Turbines	14
Turbine Model	Suzlon S88
Turbine Capacity	2.1 MW
In-Service Date	Sept. 2008
Hub Height	80 meters, (262 ft.)
Blade length	43 meters, (142 ft.)
Blade weight, single	8,165 kg, (18,000 lbs.)
Rotor Diameter	88 meters, (289 ft.)
Rotational speed	15 rpm
Blade tip speed	71 m/s, (159 mph)
Cut-in wind speed	4 m/s, (9 mph)
Rated wind speed	14 m/s, (31 mph)
Cut-out wind speed	25 m/s, (56 mph)
Power Supplied to	Cheyenne Light, Fuel & Power
Land Area	750 acres
Concrete used	5,965 cu. yds.
Wire and cable used	35 miles