PROVIDENCE HEIGHTS
Wind Power Project

AVANGRID RENEWABLES

Project Overview
The Providence Heights Wind Power Project is located in Bureau County, Illinois, in the north central part of the state. The 36 wind turbines at this project generate 72 megawatts (MW) of clean, renewable energy and contribute jobs and tax revenue to the local community. The project supports the local economy through lease payments to local landowners and tax payments to the county. The project's construction period, which concluded when the project became operational in mid 2008, created numerous jobs. The project takes its name from an abandoned settlement (Village of Providence) located within the project boundary.

Project Details
Project Capacity: 72 megawatts (MW)
Number of wind Turbines: 36
Project Location: Near Tiskilwa, Illinois, Bureau County. The project encompasses about 5,200 acres of land leased from 31 local landowners. The project footprint covers less than one percent of the project's total acreage. The surrounding land continues to be used for its primary purpose, corn and soybean farming.

Developer and Owner
Avangrid Renewables, LLC is a subsidiary of AVANGRID, Inc. (NYSE: AGR) and part of the IBERDROLA Group. IBERDROLA, S.A., an energy pioneer with the largest renewable asset base of any company in the world, owns 81.5% of the outstanding shares of AVANGRID common stock. Avangrid Renewables, LLC is headquartered in Portland, Ore., and has more than $10 billion of operating assets totaling more than 6,000 MW of owned and controlled wind and solar generation in 22 U.S. states. Avangrid Renewables recently changed its legal name from Iberdrola Renewables, LLC.

Technology
Wind Turbine Type: Gamesa G87
Rated Output: 2.0 MW (2,000 kW)
Turbine Height: 397 feet (121 meters) as measured from the bottom of the tower to the tip of the highest blade.

Nacelle Weight: Approximately 70 tons (140,000 lbs.)

Tower Facts: Four-section, tubular steel
Tower Height: 256 feet (78 meters)
Tower Weight: 203 tons (406,000 lbs.)

Blade Facts
Swept Area: 63,957 square feet (5,944 square meters) per turbine, about 1.5 acres
Blade Length: 138 feet (42 meters)
Rotor Diameter: 285 feet (87 meters)
Revolutions per Minute: 9 to 19 (one revolution every 3 to 7 seconds)

Technology (continued)

Foundations: Each individual wind turbine foundation consists of an octagonal spread footing of 56 feet wide, eight feet deep. Concrete volume is 435 cubic yards per turbine or 15,660 total cubic yards – that's more than 1,500 truckloads.

Balance of Plant Infrastructure

Turbine Access:
Provided six miles of gravel-surfaced roads
Transmission Interconnection:
To Commonwealth Edison's 138kV system

Construction

Infrasource: Access road construction, foundation construction and collection system installation
MJ Electric: Substation construction
Gamesa: Turbine installation and commissioning

Project Benefits

Households Served: Providence Heights will produce enough clean, renewable electricity each year to power the approximate equivalent of 18,000 typical Illinois homes.

Local Economic Benefits

Taxes paid by Providence Heights:
$500,000 – $750,000 annually
Local landowner payments paid by Providence Heights:
Approximately $300,000 – $400,000 annually

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