

TOP CROP WIND FARM PROJECT



Sargent & Lundy Services:

- ❑ Transmission Line Engineering & Design
- ❑ Substation Engineering & Design
- ❑ Collection System Engineering & Design
- ❑ Material and Equipment Procurement Support
- ❑ Construction Field Services

Horizon Wind Energy
Houston, Texas

Sargent & Lundy performed engineering for Horizon Wind Energy's Top Crop Wind Farm Phases I & II, located near Pontiac, Illinois.

Engineering was initiated in the spring of 2008 to design the 345 kV interconnection switchyard, named Katydid Road by Commonwealth Edison, the phase I 345/34.5 kV project substation and 34.5 kV collection system. Engineering for the phase II substation, collection system and 345 kV transmission line began in the spring of 2009.

The Top Crop Wind Farm has a rated output of 102 MW for phase I and 198 MW for phase II. Additional phases of the project are also planned.



S&L's scope of work included engineering and design of:

- The Katydid Road 345 kV interconnection switchyard.
- The 345/34.5 kV Top Crop I and Top Crop II Project Substations.
- Top Crop I and Top Crop II 34.5 kV underground collection systems.
- 0.2 miles of 345-kV transmission line.

Our substation scope of work included electrical and structural engineering, grading design,

support for procurement of material and equipment, construction quality assurance and substation commissioning services. The collection system scope of work included electrical studies, cable sizing, equipment selection and design drawings. Our transmission line scope of work included transmission line structure spotting, transmission line design and support for procurement of major materials.

S&L and the Horizon Wind Energy team worked closely with Commonwealth Edison staff to design the Katydid Road Switchyard according to their standards and practices and to coordinate the interface of the protection and control systems.

Construction of Top Crop I began in April 2009 and went into service in October 2009. Top Crop II is scheduled to start construction in early 2010 and be completed in mid-2010.



Based in Houston, TX, Horizon Wind Energy LLC develops, constructs, owns and operates wind farms throughout North America. Horizon is owned by EDP Renováveis, S.A. ("EDPR"), a global leader in the renewable energy sector.

