

Come Hell and High Water: SunWind Power Systems Installs First 15 kW Proven Wind Turbine for Hoosier Energy in Indiana



Flooding occurred in Indiana following June storms.



SunWind Power Systems installs 15 kW wind turbine for Hoosier Energy.

Though complicated by numerous difficulties and natural disasters, the first U.S. installation of a 15 kW Proven Energy wind turbine was erected in June of 2008. SunWind Power systems installed the turbine for Hoosier Energy, along with a 3 kW ground mount PV system at the Turtle Creek Reservoir in Merom, IN. The reservoir is used as a cooling pond for the nearby power plant. The renewable energy systems would supply power for the educational center at this site. During the second week of June, the directors of Touchstone Energy cooperatives throughout Indiana would be convening to the site to inspect the installed systems at a planned kickoff event.

The wind turbine to be installed was manufactured by Proven Energy, a company founded and located in Scotland. The company sells its turbines globally but has not, up until now, had one of its 15 kW turbines installed in the U.S. The turbine arrived by ship in a New York port under a tight delivery schedule from the supplier. Unfortunately, the container was selected randomly for inspection by customs, causing a delay in shipment which could have affected the ability to erect the turbine prior to the event, less than 4 days away.

When the container was released from customs, the weekend had arrived and the shipping company would not deliver the turbine because it did not operate during the weekends. Therefore, an alternate shipping company was employed to complete the delivery to Merom. The driver ran into the bad weather and storms that were pounding the Midwest region of the States, later declared a Federal disaster area. Merom did not escape the storm. On the night of June 6th, storms poured 8 inches of rain down in this area; spawning tornados and flooding, washing out roadways and jeopardizing dams. As you may imagine, these circumstances made the installation of the wind turbine prior to

the June 9 kickoff event at Turtle Creek, questionable. However, Hoosier Energy wanted the turbine installed, come hell AND high water!

The turbine did arrive on the site Saturday morning. But Jeremy Coxon, chief engineer and Vice President of SunWind Power, along with Proven representative David Jolly, ran into an obstacle on their way to Turtle Creek Reservoir. Because of the excess rainfall from the previous night, water was flowing over the dam that lay between them and the job site – only the third time in 20 years (and never so fast). Heavy equipment from Hoosier Energy was being utilized to prevent the bridge from washing away. Coxon and Jolly had to take an alternate route to the job site down a gravel dirt road, crossing through water 18 inches deep.

Because this would be the first 15 kW Proven turbine to be installed on a non-tilt up tower, the use of a crane was required. There were serious concerns that the crane operator would not be willing to set his equipment in the middle of a wet soggy field, but he agreed to it. To no surprise, the equipment got stuck in the mud. Wrecker services were required but were all tied up due to problems caused by the storm. Local help was called in as a farmer agreed to use his tractor to pull the crane into position. Coxon and Jolly assembled the turbine to the tower as the crane held the tower in position. There were no signs of storms on this day as the sun beat down on the workers with high humidity to boot.



Coxon of SunWind Power and Jolly of Proven, assemble the turbine.



The turbine in hoisted up by a crane.



FINALLY, the moment had come for the crane to lift the tower and turbine into place. As the turbine slowly tilted its head skyward, it lifted the spirits of those witnessing the awesome sight.

The final hurdle was still to come. Hoosier Energy did not want the crane to exit the same way it had entered the field for fear of muddying up the parking lot for the anticipated event. The tractor had to pull the crane up a hill to exit the field and got stuck in the process. The Hoosier Energy plant manager offered his assistance to remove the crane with the same front loader used the previous day to repair the bridge. A county commissioner's permission was required to release the equipment for use, but he could

not be reached. Again, Coxon recruited the help of the local farmer. A larger tractor hitched to a smaller one was hitched to the crane and the trio was able to exit the field like a slow chugging train. In the end, the event had to be rescheduled because flooding and closed roads kept the participants away.



The tower and turbine were erected, and though not quite operational yet, are a testimonial to the great efforts of those involved, especially Coxon of SunWind Power Systems and his ability to adapt to the situation at hand and persevere in the face of a number of unforeseen obstacles. Because this installation occurred at an electrical power plant's property and will be used to supply energy to an educational center focused on teaching the public about renewable energy, it plays a vital role in generating public and political awareness for this industry in the state of Indiana.

SunWind Power would like to especially thank David Jolly of Proven Energy Ltd. for his assistance in this job.