



Hendrix Power Cable Wins with Windfarm Business

For over 50 years, wind turbines have been considered to be a viable source of clean, renewable energy, with single turbine installations providing power for local applications. To create power on a broader scale, multiple turbines were then strung together, providing a critical mass of generated power to larger applications. The first wind farm, integrating 20 turbines along the shoulder of Crotched Mountain in New Hampshire in 1980, generated 0.6 MW of power. But it wasn't until the 90's, with the help of governmental subsidies (national/state/local) in the form of tax credits or financial stimulus, to support renewable energy investment, that wind power began to be considered on a broad scale for much larger power generation needs. Since then, leading energy companies like NextEra Energy, Inc. have been developing wind farms across North America and other conglomerates are implementing the technology around the globe. Modern day wind farms now have as many as three to four hundred turbines, generating as much as 1,300 MW of power.

Timing is critical

To be most efficient and effective in their power generation capacity, wind farms need to be where the wind is most prevalent. This often leads to wind farm development in remote locations with challenging access in rural areas. Most of the work involved with building a wind farm – from turbine pad development to tower and turbine installation – is done by specialized crews brought in from afar, that need to be scheduled and coordinated with very little leeway for delays and interruptions to ensure projects are completed in time to take advantage of the governmental subsidies. As a result, project schedules are tight, and timing of material delivery to the job site is coordinated with narrow margins for error. Any misstep leading to a delay can equate to hundreds of thousands of dollars worth of penalties exercised by the utility, thus hindering the financial returns for the project.

In a typical process, the delivery and installation of the wind power collection grid cable takes place in between the pouring of the pad and the crane work for the turbine – usually a very tight window.

As critical and precise as the scheduling can be for the construction window, the schedule can oftentimes be impacted by funding issues, permit requirements, project interveners, changes in legislation or last-minute changes to the design or specifications required by the off-taker. Manufacturers providing materials to the job site, including cable suppliers, need to be nimble and flexible, in order to accommodate any changes along the way. But also confident in their ability to deliver once contracts are signed and promises are made.

Coming through in a pinch

NextEra Energy Resources, LLC (“NextEra”) is one of the largest clean energy companies in North America, with revenue of over \$15 billion, and over 95 percent of generated electricity coming from clean or renewable resources. In 2012, NextEra was in the process of developing the Tuscola Bay Wind Energy Center in Tuscola Bay and Saginaw Counties, Michigan. The installation timeline was in place to coordinate the numerous phases of the project. With only weeks to go before the scheduled delivery of the cable, Hendrix Power Cable got a call from NextEra requesting a rush delivery. The cable company that was contracted for the job was running behind schedule and could not meet the additional demand. NextEra needed to pull the trigger on another option. The order was for 181,000 feet of 1250 kcmil cable, and it needed to be delivered in four weeks.

Getting it done

Aggressive lead times have always been a hallmark of Hendrix Power Cable, but four weeks was going to push the envelope of any cable manufacturing operation. The Hendrix manufacturing facility in Milford, NH, however, is no ordinary cable manufacturing operation. It’s a tight ship that’s run with the precision of a Swiss watch, but with the built-in flexibility to deal with the reality of the market – and customers that are in a pinch. There are protocols in place that provide the visibility of the entire production process, and the team at Hendrix knew they could get the job done on time and on budget. And deliver they did. The Hendrix team provided the exact cable length that was needed for the job – another key requirement for cable supplied to wind farms – and it was delivered on time; precisely when it was needed at the job site.

The Tuscola Bay installation was the first of many NextEra wind farm projects that put Hendrix to the test, and since then Hendrix has done numerous projects for NextEra and has delivered. As a result of their solid on-time performance and the ability to get it done, Hendrix has become a reliable go-to resource for wind power collection grid cable for NextEra.



Hendrix Power Cable Capabilities – Wind Farm Applications

- Flexibility of Scheduling
 - Short lead-times
 - Make adjustments for schedule changes
- Flexibility on Lengths
 - Accommodate changes, up to production start
- Accurate Lengths
 - Manufacture to project requirements
- Reliable Delivery
 - Solid on-time performance
- Shipment Flexibility
 - “Bill & Hold”
- Relationships built on trust

