If Shane LaRue, Brad Lowery or Nathaniel Johnson would have told their grade school teachers that they wanted to grow up and work on windmills, there might have been laughter in the classroom. In rural communities, the word “windmill” only referred to those little towers that pumped water for farmers. Twenty years ago, when those young men were in elementary classrooms, those structures were obsolete, and no one was talking about windmills that actually generated electricity.

Today, LaRue, Lowery and Johnson are working for Pilot Hill Wind Farm, a division of San Diego-based EDF Renewable Energy. They play a critical role keeping the 103 area turbines churning out the 175 megawatts required by a 20-year power purchase agreement with Microsoft Corporation’s Chicago data center.

Pilot Hill is located across 14,700 acres of farmland in Kankakee and Iroquois counties. The connection with a high-tech, industry leader such as Microsoft points to a growing trend of “blue chip” organizations who want to take control of their energy destiny and reduce their carbon footprint.

The three technicians came from a variety of backgrounds, but shared a vision for the future of clean energy — a vision they achieved through Kankakee Community College. KCC has broke ground on its $5 million Advanced Technology Education Center (ATEC), which will better train students in three energy-related classes: solar thermal technology, solar photovoltaic technology and wind energy technology.

“I just finished at KCC,” said Johnson, 38. “I completed all four degree tracks in the Electrical Technology Program. I was in the Illinois National Guard for six years, and I was out and working for AT&T when I got laid off. I knew I had to find something with a future.”

LaRue, 31, felt the same way about a job with staying power, but that was a distinct change of direction.

“IT was out of the military and living in Florida, when I wound up talking to Tim Wilhelm, the program coordinator of KCC’s Electrical Technology Program. He convinced me to come back and get into this field.”

Work on the ATEC building began in the spring but has been temporarily halted because of state funds being held up — a result of the ongoing budget impasse. Wilhelm said the goal is to have the addition ready for students by the fall of 2016.

Students in the electrical department graduate with an associate’s degree in electrical technology. There are focus tracks in Industrial Electrical Technology, Industrial Machinery Maintenance, Instrumentation and Process Control and Renewable Energy Technology. The idea is to have students qualified for all kinds of jobs, not just wind or solar.

At Pilot Hill, there is more to the job than an understanding of electrical power generation. These employees have to be fit enough to climb 300 feet to the top of a turbine. They also have to possess a constitution that allows them to walk out on top of one of those structures, tethered only by their safety equipment.

“A typical shift might send the men to repair items at the base of the towers. They might climb to the top for interior adjustments. Or they might go out on top and drop down to the point where the blades are attached. The Pilot Hill output is the equivalent of the electricity consumption of 70,000 Illinois homes, so maintenance is a critical issue.”

“Eventually you get used to it, but you can never be complacent,” said Lowery, 25. “You have to be the kind of person willing to go out there in rain or cold. And I don’t have to mention windy. They wouldn’t have built out here if it wasn’t windy.”

And, while the industry requires a physical component, it also tends to breed a different kind of psychological outlook.

“I was offered other jobs ... with fossil fuels. And I turned down more money, because I believe in this. ... I’m in this because it’s the right thing to do.” — Shane LaRue