

system accomplished

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Installer Overcomes Blizzards with Preassembly

FOR INTEGRATOR BUSINESSES IN THE NORTHEAST, it's not an option to chalk up wintertime as an off-season. Wise Power Systems (wisepowersystems.com), of Wilmington, Del., has standardized a method of remote assembly that allows the design and engineering firm to work through winter storms with minimal interference.

Wise was scheduled to install a 1.1-megawatt system in January and February, for RFC Container and Russo Farms on the outskirts of Vineland, N.J.

"During the five-week period we installed [the Vineland system], we had five major snowstorms," said Bill Rawheiser, president and owner of Wise Power Systems. "New Jersey had the third-highest snow total on record. In the field, half the time the guys were shoveling snow and not putting up solar panels."

On its most productive day, Wise Power's eight-man crew was able to install 70 kilowatts, well over double the average build rate of 27.5 kilowatts per day.

Preassembly, accounting for 30 percent of total project labor, took place at Wise Power's Delaware factory, about 60 miles from the site. Using Unirac's (unirac.com) ISYS Ground Mount racking system, the rails,

grounding wire, grounding lugs and 4,080 280-watt Grape Solar (grapesolar.com) polycrystalline modules were fastened together indoors. The crews assembled the racks in five-high configurations with strings of 10 modules already plugged in. These were loaded onto six custom-made trailers and transported in 10-kilowatt (kW) loads.

Back at the Vineland site, a crane hoisted the racks onto 38-foot east-to-west I-beams. The system was grounded with 272 20-foot I-beams, which were vibrated in. On its most productive day, Wise Power's eight-man crew was able to install 70 kW, well over double the average build rate of 27.5 kW per day.

In the snow and melting slop, the crew regularly wore hip waders. Despite blinding winds up to 63 mph, the team finished the job in only 40 days.

"For this project, preassembly probably saved me about 25 percent on labor costs and time," Rawheiser said. "I think it's where the industry will go eventually. People are going to start to see the savings." —MIKE KOSHML



WISE POWER SYSTEMS

Indoor preassembly accounted for 30 percent of total project labor for Wise Power's 1.1-megawatt Vineland, N.J., photovoltaic installation, reducing labor costs by 25 percent.



WISE POWER SYSTEMS