Multiple Sites + Rocky Terrain Require Strength × Flexibility

Not every solar installation takes place in just one location with steady climatic conditions and easily manageable geology. Unpredictable weather, tough terrain and installations spread over many miles make detailed planning and communication with partners a must.

PROJECT: New York Multi-Site Project

LOCATION: Eight sites – Five in Rochester, NY; three in Albany, NY

PROJECT SIZE: 55 MWp

CHALLENGE: Rock and tough soil, heavy snow part of the year

SOLUTION: 5,334 Convert-1P Single-Axis Solar Trackers

"We worked with Valmont Solar for a project in the northeastern United States, and we wouldn't hesitate to recommend them for projects that involve multi-site rollouts or tough terrain requiring ground screws. They were easy to work with and had a knowledgeable team that we trust and would recommend."

- Arash Yazdani, P.Eng. Director of Engineering Services, PRI Engineering



Overcoming challenges on projects is something we do every day at Valmont while keeping our purpose as a company front and center through conserving resources and improving life and this project was no different. Rochester and Albany, New York, are more than 220 miles apart and average 51.6 and 77.3 inches of snow per year, respectively. Combine that climate with the rock and tough soil in northern New York state, and Valmont Solar[™] had several distinct challenges to handle.

First was the complexity of a solar project covering multiple sites, beginning in December 2021.

The materials needed for the project were stored in 170 containers being transported to eight sites from different ports and three separate warehouses. Because fluctuating temperatures, heavy snow and melting meant that some sites were not always accessible, Valmont logistics experts worked to get the correct parts to the sites where work could be done.

Success required communication with the customer to gauge site conditions and maximize installation time. In addition, all the materials had to pulled from containers and loaded on flatbed trucks to reach their destinations.

Weather and distance were not the only obstacles Valmont Solar overcame. The other was technological. Of the eight sites, five use ground screws and three have embedded posts. Valmont Solar worked closely with the engineering group on the design and in the field, deploying a brand-new ground screw design that had never been attempted before. In addition to the innovative ground screws, the Valmont Solar tracker design features a special snow-stow position for heavy snow and high winds.