

Wind Energy Corporation

# Wind Energy Structural Study

Wind Energy Corporation is executing a multiphase project at two separate locations. SSOE provided design and application engineering services for a new vertical axis wind turbine. In the first phase of the retrofit project, SSOE optimized the design of the turbine unit, its structural supports, and power electronics integration. In addition, the project scope included a complete system integration of a prototype vertical axis wind sail system. SSOE also provided inverter specification, electrical permit drawings, and controls system development.

As part of SSOE's value promise, SSOE-provided, onsite assistance at the first beta site unit has prepared this company for additional installations and further enhancements to the turbine and balance of system design.

For the second phase of the project, SSOE delivered product development support, which required multidiscipline team coordination. This effort included control and transmission system development, inverter specifications, and system integration for planned installations, which was executed by our electrical controls team. SSOE's structural team provided specifications for tower mounting and building integration. By utilizing a planned installation project delivery method, SSOE delivered a smooth schedule based on timelines and critical milestones.

## value promise

SSOE-provided, on-site assistance at the first beta site unit and has prepared this company for additional installations and further enhancements to the turbine and balance of system design.

**location** Toledo, Ohio and Weslaco, Texas

## highlights

- Complete system integration of Prototype Vertical Axis Wind Sail system
- Power electronics retrofit integration
- Inverter specification
- Electrical permit drawings
- Controls system development