

Cour Wind Farm

Objective

Our client required a safe, efficient, and cost-effective solution to repair five wind turbine generators at one of their operational wind farms in Texas. The primary goal was to restore turbine functionality while minimizing downtime and avoiding the high costs and logistical complexities associated with traditional generator removal and replacement.

Our Solution

- Aurora delivered a controlled, high-integrity blade recovery solution:
- Damage Exposure & Removal Carefully removed damaged laminate and core materials back to structurally sound blade substrate.
- Lightning Protection System Correction Identified LPS insulation failure, executed corrective works, and verified lightning protection continuity and functionality through electrical testing.
- Structural & Cosmetic Restoration Rebuilt the blade tip to OEM specification, reinstated aerodynamic form, and completed final cosmetic finishing and QA.

At a Glance

Challenges

Conducting a time-critical, weather-sensitive repair while sustaining safety and quality standards. Remote rural access with logistics and mobilisation challenges. Selecting and managing the most suitable blade access methodology for a complex, high-altitude structural repair.

Value to client

- Delivered a comprehensive inspection and root-cause assessment, ensuring informed and effective remediation.
- Restored the blade to full structural integrity and aerodynamic efficiency, extending asset life and protecting output.
- Delivered repairs in compliance with OEM and industry standards, assuring long-term safety and performance.
- Supplied detailed work documentation and imagery, providing traceability, assurance, and warranty support.

