



Case Study: CP Masters

OutBack Off-Grid Power System Installation



Overview

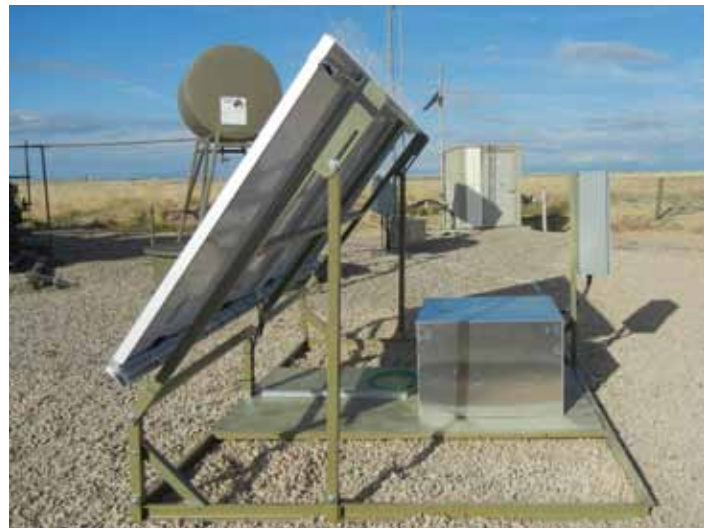
Based in Guthrie, Oklahoma, CP Masters delivers cathodic protection, a technique for corrosion prevention and control of metallic structures in the North American oil and gas industries. The company **helps clients mitigate risk, decrease unscheduled downtime and repairs, and assure owners and communities that environmental best practices are in place.**

CP Masters relies on solar power for remote oil and gas installations where utility power is either unreliable or unavailable. Solar power is a critical component of the company's promise "to protect clients' equipment and prevent dangerous leaks in well casings and pipelines."



System Specifications

- Location:** Guthrie, Oklahoma
- System Power:** 8.0kW Solar System
- Components:** FLEXmax Charge Controllers, Radian Series Inverter/Charger, MATE 3 System Display and Controller and HUB



OutBack Power helps us ensure 24/7 uptime for installations in remote gas fields, where our clients must leverage solar energy for power to maximize equipment performance and ensure the highest safety standards."

Brandon Langley
Vice President of Manufacturing, CP Masters



Objectives

- Guarantee 24/7 uptime for remote gas installations, where equipment is powered by solar energy and batteries.
- Ensure complete safeguarding of client sites and surrounding wildlife areas.
- Increase renewable energy yield without incurring high maintenance costs.

Solution

After acquiring a company that had successfully implemented OutBack Power products into all existing systems, CP Masters made the decision to deploy OutBack's **FLEXmax charge controllers** equipped with Maximum Power Point Tracking (MPPT) into all future installations. The FLEXmax was installed in 1,200 client sites across the country where reliability was constantly challenged by harsh environmental conditions, such as extreme temperatures ranging from 120°F to -40°F.

OutBack's built-in temperature compensation proved to be very effective due to its ability to prevent batteries from overcharging or undercharging under severe conditions, either of which can lead to significant expenses over time. Because the FLEXmax controllers have a built-in disconnect function, CP Masters was able to stop both investing in external disconnect cards and manually connecting controllers to relays at each site. As part of its future technology implementation plans, the company is also adopting OutBack's new **Radian Series inverter/chargers** and is piloting **MATE3** and **HUB** system displays and controllers to seamlessly program, manage and monitor solar energy systems.

Benefits

- Built-in disconnect feature eliminates the labor required to build 100 external disconnect systems per year and saves \$50,000 annually in related expenses.
- Temperature compensation reduces battery replacement costs—one of the largest expenses occurring in client applications.
- Provides safe, reliable, renewable energy to power remote gas and oil fields protecting mission-critical equipment.