

Northwood Trail England

OFF-GRID CASE STUDY



SYSTEM SPECIFICATIONS

Location Northwood Forest, York, England

System Power 11.4kW

Components

- (2) Radian™ GS3548E w/ GSIC
- (2) FLEXmax™ 100
- (24) OPzV Battery Bank

OVERVIEW

Christian already ran a successful luxury camping business in a forest near York, England. His next plan was to create a fairy trail around the nearby forest. There, children could explore in an exciting and safe environment with a fairy museum and grotto in a cabin, complete with a restaurant that serves high quality locally-produced food and drinks. He already had limited electricity on the camp site, but the power company could not connect any additional loads. He was quoted a large fee from the local grid for a new connection, and as the land was on a lease, Christian was not willing to add value to the land at his cost. In addition to that, he was also keen on making the business sustainable, similar to the camp site.

CHALLENGE

- Have enough budget to buy a complete stand-alone system
- Generate reliable, clean electricity in a rural area
- Build a self-contained, non-permanent system
- Be fully supported by a professional installer, with remote monitoring and control

SOLUTION

- Xerogrid Ltd. presented a number of case studies suggesting an already well-proven setup using the OutBack Power Radian inverter/charger
- The system could be built in a container nearly 150 meters away from the restaurant without experiencing voltage drop
- FLEXmax 100 charge controllers provided high voltage and output to the battery bank

OUTCOME

- The system is monitored, controlled, serviced, and seasonably adjusted by Xerogrid Ltd. so Christian can concentrate on running a great restaurant
- April through September, there is enough power from the solar panels to forego the use of a generator
- If there isn't enough sun, the generator will automatically start and recharge the batteries

