



Case Study

Waitomo

OutBack Power Off-Grid Residential/Home Office Case Study



SYSTEM SPECIFICATIONS

Location Waitomo, New Zealand

System Power 3100W peak power

Components

- (12) OutBack EnergyCell 200RE batteries
- (2) OutBack FXR inverter/chargers
- OutBack FLEXmax 80 charge controller

Design & Supply Independent Power NZ

Commissioning June 2017

Overview

System owners, Guy Chris and James Cavanagh had spent a lot of time researching how to approach an off-grid power system upgrade. They knew ***it wouldn't be a straight-forward job because to take advantage of wind and solar power the system would need to be integrated with the existing wind turbine.***

Guy and James selected Independent Power to design and supply the product needed because of their professionalism, helpfulness and industry knowledge. Independent Power used their skills to optimize the design in such a way that it significantly brought down system cost which resulted in serious savings for the owners.

Challenge

- Existing power supply system was too small to cover new owner's needs
- Previous solution was a DIY, non-compliant system with batteries nearing end of service life
- Frequent system failures causing too much noise, pollution and cost related to generator operation during outages

Solution

- Install a new, much larger PV array with integration of existing wind turbine
- System designed based on OutBack equipment with high quality battery bank

Outcome

- Significant improvement of system owner's quality of life
- Abundant, highly reliable power available 24/7 and with increased energy storage, power is available during instances of no sun or wind
- ***No electricity bills!***

