



### SYSTEM SPECIFICATIONS

**Location** Waitomo, New Zealand

**System Power** 3100W peak power

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

## 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 straightforward 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!

