prolectric™ SMART CLEAN TECHNOLOGY + Magnox

Case Study

Magnox

After the initial concern of suggesting to run a diesel generator 24/7 for the project duration, Magnox hired the ProPower Solar Hybrid Generator.

The evident demonstration of the effectiveness of commercially available solar hybrid equipment has been the driving force behind this investigation.

This provided a great example of sustainable solutions meeting the needs of projects on site and demonstrates the applicability of using solar hybrid systems.

Jack Armitage
Consultant

Background

Magnox are responsible for the safe and secure clean-up of 12 nuclear sites and the operation of one hydro-electric plant.

Magnox works with the Nuclear Decommissioning Authority.

Their purpose is to manage sites through their lifecycle's, overseeing all aspects of operation, defuelling and decommissioning.

Challenge

A recent land remediation project at the Winfrith site required a mobile off-grid power source in order to operate an excavator bucket monitoring system and a high resolution gamma spectrometer with a turntable for gamma assay of builder's bags, required to process 600m3 of soil.

The contractor's equipment required constant power to maintain suitable operating temperatures of the equipment.

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Power Solar Hybrid Generator

Case Study Magnox

The Solution

After the initial concern of suggesting to run a diesel generator 24/7 for the project duration, Magnox hired the ProPower Solar Hybrid Generator.

The ProPower was used as the sole source of power for the project duration of 6 weeks and at no point was the in-built backup diesel engine required.

The ProPower successfully met all the power requirements for the entire project, resulting in zero carbon emissions compared to the use of a traditional diesel-generator.

The Result

It is estimated that the use of the ProPower saved approximately 5,000 kg of CO2e and 1,866 litres of diesel over the 6 week project, resulting in savings of over £2,873.

Early engagement enabled the Magnox project team to encourage use of a more sustainable solution for a commonly undertaken process.

The generator's successful utilisation has inspired colleagues to explore the implementation of solar-powered welfare facilities for future site projects.

Carbon Savings 5,000 kg of CO_2e

Fuel Savings 1,866 litres of fuel

Cost Savings £2,873

Why choose Prolectric?

Reduced Emissions
Offers huge CO_2 emissions benefits vs traditional diesel generators.

Reduced Noise
Silent overnight power from battery storage, ideal for urban & night projects.

Advanced Technology
Remote control, monitoring and reporting capabilities.

Reduced Fuel Usage
The ProPower can cut fuel usage by up to 90%.

Minimal Maintenance
Reduced generator run-time means less maintenance.

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