CASE STUDY - SERVICE



Client **Project Title** Service date

Investigate poor performance

Gillian Jack

April 2016

Solar and Wind Applications were invited to attend to investigate suspected low performance of the Solar PV system. After taking some details over the phone, it was established that the system was performing significantly worse than expected. The original installer was no longer trading.

Technical Information

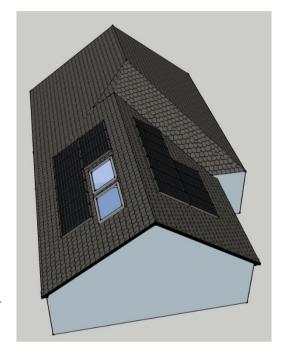
The system was found to consist of:

- 21 Solar PV modules of 190W each
 - o 10 modules approximately East Facing
 - o 11 modules approximately West facing
- Power One Aurora 3.6 TL Outdoor Inverter

Energy Generation

Solar and Wind Applications carried out a Yield Estimate, based on the system as installed on site taking shading into account. We deemed a figure of 2,750kWh per annum as a reasonable conservative estimate.

Since installation in February 2012, the system had produced only 5,642kWh – significantly lower than our calculated expectations.



Repairs Carried Out

At the time of our original visit, we observed the East facing array to have been connected to the inverter system with reverse polarity. As a result this string had not produced any power at all since the system was installed.

This was easily fixed at the time, and the system was brought up to the full designed power.

We also quoted for and subsequently carried out other remedial works to improve the safety and bring some elements of the installation up to relevant industry and wiring regulation standards.

"I'm happy to go ahead with your further recommendations...I'm just delighted the system is up & running again & performing at its best now, thanks to Solar and Wind Applications." - Gillian Jack

Benefit

Following our visit, the system will be monitored to ensure there are no other factors impacting on the system's performance. It is expected that the system should now be performing correctly.

Increased annual FIT income for this system is estimated at around £560, easily paying back the cost of our visits within the first year.

Directors: Rod Macneal CA (Managing) Lorn Macneal DA RIBA FRIAS Marty Mellis-Fox BEng (Hons) MIET



