

Hybrid Generator Case Study

“We need to power a security cabin overnight at an upcoming festival. We are planning on running a supply from a nearby generator – do you have another option which could save us money on fuel?”

In recent years, one of the biggest changes to the temporary power industry has been the rise in popularity of Hybrid Generators. Working in conjunction with a diesel generator, they offer a period of noise free and fuel free power.

With potentially huge savings in fuel usage and carbon emissions, more and more of our clients are contacting us to discuss using Hybrid Power for their next project.

A recent enquiry from one of our major event clients, putting plans together for an upcoming festival in the North West, gave John F Hunt Power the opportunity to cut our clients fuel usage, making them more efficient and saving them money on fuel.



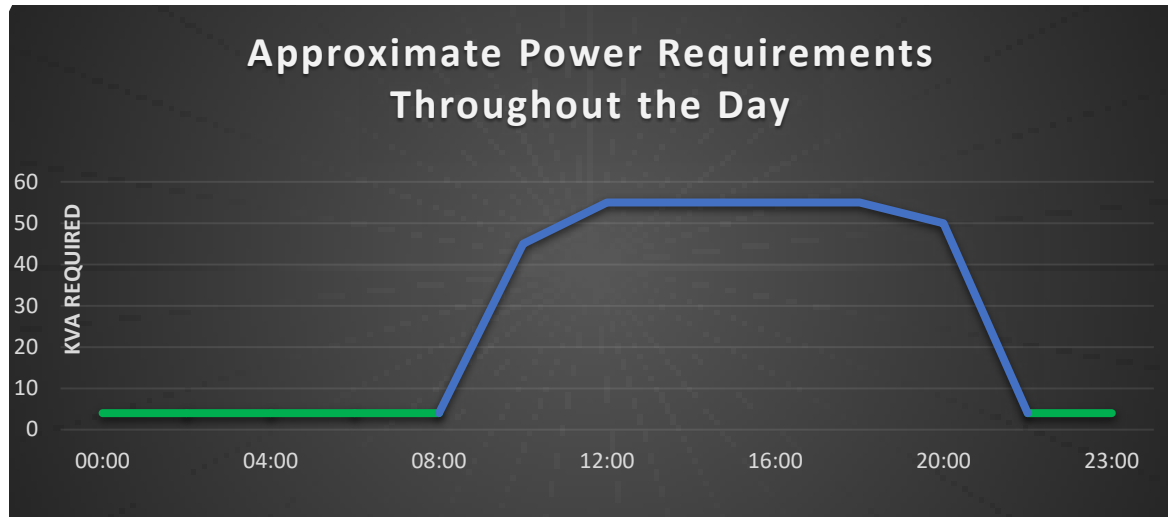
With this particular event, various generators were required to run the site in the day, but the only requirement overnight was a small amount of power for a security cabin.

In previous years, the power for security had always come from a nearby 60 KVA Generator. Running 24/7, it provided power for food stalls during the day and then for security overnight. With such little power required out of hours, the client contacted us for a more efficient solution.



What did John F Hunt Power propose?

After sitting down with the client, we were able to estimate their power requirements on an average day – shown in the below chart.



As in previous years, during opening hours of the festival (period shown in blue) a 60 KVA Generator was required to provide enough power for food stalls. But outside of these hours (period shown in green) the power requirement was much lower.

Taking the above into consideration, we proposed operating a 60 KVA Generator in conjunction with one of our Cygnus 3 Hybrid Generators. With 48 kWh of battery storage, the Cygnus 3 would have more than enough usable energy to provide power for security overnight.

What was the result for the client?

As with all generator and hybrid packages, the success of the job relied on the people on site. Trying to draw too much power from the hybrid drains the batteries quicker, meaning the generator must start up to re-charge the unit.

The security staff on this job ensured all non-essential items were switched off out of hours, meaning they were able to run their heater and lighting solely from battery power for 10 hours every night.



Equipment	Run Time	Approx Load on Generator	Approx Fuel Consumption (L/H)	Estimated Daily Fuel Usage
60 KVA GENERATOR	14 HRS PER DAY	75%	10.92	225.68
	10 HRS PER DAY	50%	7.28	
60 KVA GENERATOR	14 HRS PER DAY	85% (inc +10% for Battery re-charge)	12.37	173.18
HYBRID GENERATOR	10 HRS PER DAY	-	0	

Using our approximate fuel consumption figures, displayed in the above example, by reducing the generator run time by 10 hours per day, we estimated a saving of over 50 litres of fuel per day for our client.

By operating a Hybrid Generator package in this way, our client experienced a more efficient and, most importantly, a more cost-effective power supply for their event.

Contact one of our depots today to discuss Hybrid Power for your next job.

