WBPS POWER YOU CAN TRUST

PROJECTS

WB Power Services (WBPS) was first established in 1983 and since then we have grown significantly in size and service capability. Today, we provide critical power services to some of the UK's most important businesses and organisations, ensuring essential services are protected. We are proud to retain our family values on a national scale as we strive to be the biggest and the best power generation company in the UK.

CASE STUDY

SURREY HOSPITAL

This Surrey Hospital is one of the largest community health service providers in the UK. It is a major acute hospital that offers care to over 490,000 people in South West London and North East Surrey.

WB Power Services were awarded the opportunity by the Foundation Trust to scope, design and install a power solution for the hospital, providing vital back-up power for the facility in case of a mains power failure.

PROJECT OVERVIEW

1000kVA

GENERATOR INSTALLATION
1 x Kohler KD1000-F generating set installed on-site

40,000 LITRES

FUEL MANAGEMENT SOLUTION
2 x 20,000 litre bunded bulk fuel storage tanks installed

BESPOKE ACOUSTIC ENCLOSURE
Generator was installed within a bespoke, acoustic enclosure

WB Power Services Ltd, Heanor Gate Road, Heanor Gate Industrial Estate, Heanor, Derbyshire DE75 2RJ
sales@wbpsltd.co.uk | 0115 9444 422 | www.wbpsltd.co.uk

PROJECT OVERVIEW

The installed solution comprised of 1 X 1000 KVA generating set installed in a roof mounted acoustic enclosure with extended exhaust gas flue, 2 x 20,000 litre bulk fuel storage tanks, fuel pipework installation and commissioning works.

GENERATING SET

The installed generating set was a Kohler KD1100-F 1000 kVA prime rated set, which was built to the following specification:

- BASEFRAME FUEL TANK
- ENGINE HEATER
- ALTERNATOR HEATER
- LUBE OIL DRAIN PUMP
- CE CERTIFICATION
- APM403S REMOTE START CONTROL PANEL
- SET MOUNTED, 4 POLE SCHNEIDER ACB
- AUTOMATIC LUBRICATING OIL REPLENISHMENT SYSTEM
- AUTO REFILL KIT
- ENCLOSED SPRING ANTI-VIBRATION MOUNTINGS

The KD1100-F Kohler generator set on-site within it's bespoke acoustic enclosure, ready to be lifted into it's final position

OFF LOADING & POSITIONING

Delivered and installed over six days, the generating set was offloaded and positioned on the roof deck of an incumbent single storey boiler house. Due to cranage weight requirements, the bespoke enclosure was demountable. This allowed the set to be offloaded and positioned first before the enclousure was positioned on top. The accopmanying bulk fuel tanks were installed in a ground level compound.

ACOUSTIC EQUIPMENT

The generating set was installed in a roof mounted enclosure with a bunded, acoustic base, built to achieve sound levels of 75 dBA @ 1m. The enclosure was also supplied with the following:

- END MOUNTED INLET AND OUTLET ATTENUATORS
- HIGH LEVEL LINK BOX
- ALUMINIUM METAL SPRAYED EXHAUST SILENCERS

End positioned inlet attenuator positioned on the end of bespoke acoustic enclosure

FUEL SYSTEM

The newly installed Kohler generating set, along with existing 100kVA generating set and new boilers are were to be fed from a new bulk fuel storage facility. WBPS supplied two 20,000 litre bunded bulk fuel storage tanks, each complete with the following:

- TANK MOUNTED DUTY/STANDBY FUEL TRANSFER PUMPS
- TANK MOUNTED FUEL POLISHING SYSTEM
- DUPLEX FUEL STRAINERS AND DIFFERENTIAL PRESSURE INDICATORS
- DOUBLE FILL POINT CABINET
- 720M OF JACKETED FUEL PIPEWORK WITH LEAK DETECTION

FUEL PIPEWORK

Further to this, WB designed supplied and installed a bespoke feed and return overflow pipework system, between the bulk fuel storage tanks, generators, boiler house and fill point cabinet.

EXHAUST FLUE

Within the designed solution included the supply and installation of an extended exhaust gas flue from the silencers to a height of 18m above the generator enclosure.

COMMISSIONING

Once installed, the sets undetook a thorough commissioning process over 7 days, carried out by the engineering team at WBPS. All generators were commissioned with no issues and now provide a reliable, cost effective standby power solution!