

THETFORD POWER STATION

EUROPE'S LARGEST BIOMASS FUELLED ELECTRICITY GENERATOR IS POWERED BY MEMS.



MEMS Power Generation provided the power solution using temporary generators for Fibrothetford at Thetford Power Station for their annual maintenance programme.

Thetford Power Station is quite unique ...at 38.5MW, it is the largest chicken litter fuelled plant in the world and is Europe's largest biomass fuelled electricity generator.

The plant is located at the centre of England's poultry producing region and consumes 420,000 tonnes of litter each year.

High quality fertiliser is produced at the plant that is marketed through a group wholly owned subsidiary, Fibrophos. The plant was designed to benefit from the experience gained at the two earlier plants at Eye and Glanford. At its heart is an extremely reliable and robust chain grate, spreader stoker combustion system. Steam conditions are 450°C and 65 bar.

As part of our annual outage this year we undertook major maintenance work on our station transformer that involved shutting down our usual fixed power supplies for over 15 days. At the same time we were also planning to undertake over £2.5M of scheduled maintenance and capital project work so the supply of efficient and reliable temporary generation was of the utmost importance to us. MEMS gave us confidence in their professional approach to helping co-ordinate our requirements and also made available support technicians to ensure the shutdown got off to a good start minimising disruption to over 150 other contractors. Using an unknown contractor was a concern to us but the approach of MEMS and the early support we received more than met our expectations and we would now definitely consider using them throughout the portfolio of EPR's businesses in the United Kingdom. **Stephen Rose, Station Manager.**

EDF Energy recommended MEMS power rental services to Stephen Rose whom had previously used another supplier who he felt had over engineered his requirements.

MEMS Engineers attended site to make an assessment of loadings and the exact site requirements in order to engineer the most effective solution for the customer. MEMS advised using generators operating in parallel redundancy mode to share the loadings; this method would also provide back-up in the event of single unit failure and allows servicing to be completed without the need for shutdown eliminating any disruption to site.

4 x 500kVA generators were supplied to site together with 2 x 100kVA's and 2 x 16kVA units complete with the appropriate cables and distribution equipment as required. MEMS provided installation, babysitting and fuel management for the duration of the hire period which in total lasted for 4 weeks.

Following the success at Thetford Power Station, MEMS have been recommended to Elean Power Station, the largest straw burning Power Station in the World, for their upcoming maintenance programme.