



Backup Power

Case History

Keadby Pumping Station

Powering Your Business

YORPOWER

Location:

Scunthorpe, England

Product:

3000 kVA Cummins Generator

Purpose:

Backup power

Primary Choice Factor:

Supply and installation by YorPower

Keadby Pumping Station is over 80 years old, and became a part of the Environmental Agency's (EA) £140 million asset repair programme in 2020.

YorPower was proud to have been involved in the huge project, mainly because the pumping station aims to reduce flood risk and bring environmental benefits to a 500-kilometre area that covers North Lincolnshire, South Yorkshire and North Nottinghamshire.

Despite numerous interruptions and issues with COVID-19, YorPower successfully supplied and installed a huge 3000KVA Cummins Diesel Generator onto a pre piled landing platform that was located just a couple of meters back from the water's edge. A mains electrical supply delivers power to the site and into the Pumping station, however, should that fail, the generator would start automatically and ensure full backup power be delivered to the station to prevent catastrophic failure.



One of the major challenges at site was manoeuvring the diesel generator and its fuel tank into final position. At a combined weight of 55 tonnes this was no mean feat! Due to the close proximity of residential property, part of the agreement between the EA and the residents was to ensure a very low noise level was achieved even when the generator was running flat out and delivering 2800kW's of power. The noise level had to be no greater than 60dB(A) at 1m and for such a large genset, that was extremely challenging to achieve. (Equivalent to the hum of an air conditioning unit).

"The design was a real challenge both in terms of space available to locate the genset and also to minimise noise break out. That coupled with installing a completely new underground fuel delivery system was no easy task, however, we worked closely with our client, Galliford Try and the EA to deliver a scheme on time and on budget. We even conducted the Client Witness Test during the first National Lockdown in early 2020, which presented challenges on operating safely and within the government guidelines. Needless to say, the client was delighted and if I do say so myself, so are we!



With the diesel generator now installed, final commissioning now complete, switchover from old to new system is imminent. Keadby Pumping Station prevents flooding and protects 15,000 homes within the 500-kilometre area as well as having environmental benefits for the wildlife and improving the river health in the area. The Environmental Agency have plans to install more pumps over the next year as well.