

Center Parcs, Elveden – Boiler Replacement

Some 23 Years and a major fire have passed since the original opening of Center Parcs Elveden and time has come to renew the boiler plant with new higher efficiency boilers and combined Heat & Power plant.

Working as principle contractor direct for Center Parcs, we were tasked with carrying out the removal of 4 existing gas fired boilers, replacing with 3 new Hoval boiler totalling just short of 4MW of boiler output.

To make the project a little more interesting, at least 2MW of boiler must be running at all times to maintain the pool water and air temperatures. This therefore resulted in us removing then re instating one boiler, pump and associated pipework at a time, liven up and commission prior to moving on to the next. If that wasn't tricky enough the new boilers run on a different gas pressure so a separate gas supply was cut into the existing incoming 6" gas main to feed the new boilers.

To enable us to remove the existing boiler and install the replacements, we cut a 3.5 x 3 metre square hole in the boiler house concrete wall. Following completion of the works we supplied and installed a weather louvre complete with double doors to fill the hole formed.

A new gas fired combined heat and power plant was also installed. The CH&P plant returned two heating circuits back to the boilerhouse. The first circuit is an 82 degree flow which feed's straight into the heating flow & return header. The 2nd set is a low grade flow which runs at 47 degrees. This low grade supply runs through to the pool plantroom where a connection is made via a plate heat exchanger to heat the main swimming pool.

Adaption's have also been made to the main electrical LV panel serving the Pool to accept a feed from the new CH&P plant.

We have also installed a new harmonics and power factor correction equipment to the main LV electrical panel.

