



UNITED UTILITIES – WATCHGATE WTW KENDAL

Control and Power Systems Ltd were employed to design a new generator / mains synchronising control system at one of the biggest water treatment works in the North West. United Utilities Watchgate Water Treatment Works in Cumbria.

The scope of the works was design, manufacture and install of “Three” new Generator / Mains synchronising control panels suitable for fitting into the existing generator control panel locations.

The Generator / Mains control system was based around the use of CoMap IGNTC- BB -SPTM microprocessor based controllers and includes a 5” TFT colour display modules and G59 protection. The controllers will interface directly with the switchboards, breaker control, trip, monitoring by hardwire.

Along with normal site back up each panel was designed to allow the Generators to operate in parallel with the main supply in a Triad mode, this operation is either automatic or manually selected at each control panel.

An emergency battle mode of operation was also added to each panel in case of a controller failure. The generator set can be manually started via a door mounted key start controller mounted on the generator set. Suitable logic and door mounted Mains / Generator breaker push buttons then allowed the mains breaker to be opened and generator breaker to be closed to a DEAD busbar.

Due to the nature of the site CPS LTD were able to arrange a temporary generator and complete each installation in three separate weeks.

Upon completion of each of the separate installations a full commissioning and G59 testing procedure of was carried out by Control and Power Systems engineers.

Once the system was fully operational a full training program was given for the onsite electrical team.



Once again Control and Power Systems signed off a project from initial site survey through design, manufacture, install and commissioning and left the site with a very happy customer.