
WARRINGTON, UK, JUNE 23, 2005

ABB drives keep harmonics in check for South West Water

Low harmonic ABB drives have allowed a waste water pumping station to increase its pumping capacity without causing disturbances on the electrical supply network.

Countess Wear Waste Water Treatment Works, operated by South West Water, is located south of Exeter. The site, which is supplied at 11kV, already had a number of variable speed drives in operation, including a 55kW ABB drive powering the existing treatment works inlet pumps.

Because of the existing drives, the treatment works already had a high harmonic loading on site. The installation of additional drives for the new storm flow pumps threatened to increase this load to unacceptable levels. To solve this potential problem, ABB recommended the installation of an ABB low harmonic active rectifier.

Following installation of the drive and pumps, ABB tested the harmonic distortion, both at the incomer live connection and the cable between the fuses and contactor. Distortion readings were found to be much lower than a normal six pulse rectifier – around two to three percent compared with the usual level of 40 percent.

Kevin Atkin, Tendering Manager with contract panel builders Blackburn Starling, says: “We asked ABB to help and they calculated what equipment would give us the best possible solution to the problem and meet the regulations. The drive they recommended provided the most cost-effective solution to the problem of keeping the harmonics at the lowest possible level.”

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader in power grids, electrification products, industrial automation and robotics and motion, serving customers in utilities, industry and transport & infrastructure globally. Continuing a history of innovation spanning more than 130 years, ABB today is writing the future of industrial digitalization with two clear value propositions: bringing electricity from any power plant to any plug and automating industries from natural resources to finished products. As title partner in ABB Formula E, the fully electric international FIA motorsport class, ABB is pushing the boundaries of e-mobility to contribute to a sustainable future. ABB operates in more than 100 countries with about 147,000 employees. www.abb.com



Caption: Low harmonic ABB drives have allowed the Countess Wear waste water treatment works, south of Exeter, to increase its pumping capacity without causing disturbances on the electrical supply network.

For more information please contact:
Layla Hewitt
Marketing Communications
Phone: 01925 741517
Email: layla.hewitt@gb.abb.com

ABB Ltd.
Daresbury Park
Daresbury
Warrington WA4 4BT

Emma Jenkinson
Armitage Communications
Phone 020 8667 2218
Email: emma.jenkinson@armitage-comms.co.uk