



## **FAIRFORD SOFT STARTERS “SLIP INTO GEAR” FOR ENVIRONMENT AGENCY IN RETROFIT PROJECTS AT SOMERSET PUMPING STATIONS.**



**Fairford’s QFE series of optimising soft starters have been selected for three key pumping projects recently undertaken by the Environmental Agency. The QFE units have been installed as part of telemetry-equipped retrofit packages on existing slip ring motors at Huish Episcopi, Middeney and Westover pumping stations in Somerset.**

The Environmental Agency maintains the three pumping stations as part of its floodwater management system in the Langport area of Somerset. The stations help to dissipate large flows from the Somerset Moors into the local river system and assist in maintaining the raised water levels for wildlife and conservation.

Built over 30 years ago, the stations employ 130HP slip ring pump motors, which operate as reliably as when they were installed. However, the control gear and motor starters initially supplied with the motors was becoming increasingly obsolete, so a decision was taken to install a new and less complicated starting arrangement based upon Fairford QFE soft starters.

Fairford has a lot of experience replacing slip ring motor starter systems with its powerful and highly reliable QFE soft starters. The benefits of replacement are many: improved motor control and reliability; considerable space saving and reduced complexity and wiring. In addition, and importantly for the pumping station applications, the QFE soft starter is equipped with Modbus interface, which allows integration into the telemetry and control systems required by the Environmental Agency.

Initially, one pumping station, Huish Episcopi, was selected for refurbishment, the knowledge gained from this project being used to benefit the projects at the two remaining sites. The main contractor for the project was KPR Engineering of Bristol, a specialist in the design, manufacture and installation of projects in the water industry.

KPR Engineering was responsible for building the control panels for the Huish Episcopi pumping station. These integrated Fairford QFE 202 Plus soft starter units, level controllers and all cabling, including that for the Modbus communications interface. KPR also wrote the software to interface the panels to a central control facility comprising a PLC and HMI unit. This enables remote monitoring of the pumping station 24 hours a day, 365 days a year.

The success of the project at Huish Episcopi has resulted in two others for Fairford; the company subsequently supplying the Environmental Agency with further sets of soft starters for the pumping stations at Middeney and Westover.