SWAN REACH LOW LIFT PUMP STATION

Project Description

Due to the low water levels in the Murray River, the main pumps that feed the Yorke Peninsula from Swan Reach are beginning to cavitate. As a temporary fix, SA Water, through United Utilities, contracted out the design and construction of a low lift pump station which pumps water from deeper in the river to the suction point of the existing pumps. Eco Connection was subcontracted to complete all electrical design, controls and installation.

Project Achievements

Eco Connection was awarded the contract in early September 2008, and immediately began the design process given a completion date of the 19th of December 2008. Incorporated in the design was the use of a 20 foot shipping container fitted out as a switchroom to house the 630 Amp distribution and controls section including WEG VSD's to control the speed of the 150kW pumps. This innovative design has been praised by the client and will be considered as an option for future temporary installations. Eco Connection had the pump station fully operational by the target date and the station has been in continuous operation ever since.

Scope of Work

Eco Connection's scope was to manage the electrical design and installation components of the project. This involved managing the design and approvals phases of Switchboards, Control systems, SCADA interface and the Functional description of control philosophy prior to beginning manufacture and installation. Manufacture of the switchboard and control panels prior to Factory acceptance testing and shipment to site. Site installation included installation of a new switchroom, ETSA transformer, consumer mains to the new 630A switchboard, installation of vendor supplied WEG VSD's (two of), field cable ladder and underground conduit works, field power distribution and instrumentation installation and cabling, followed by all commissioning.

PROJECT SPECS

Status	Complete
Dates	Sep 08 to Dec 08
Location	Swan Reach, South Australia
Contract Type	Lump Sum
Discipline	Electrical / Controls / Instrumentation
Budget	$300k
Safety Incidents	0
Environmental Incidents	0