



ODG Haden - Curtis Island Substation Control

Background

To cater for the expanding LNG developments, The Gladstone Regional Council (GRC) installed an 11 kV Power Supply System for the Curtis Island Water and Sewerage Infrastructure Project. The system is semi-automated, consisting of two prime rated diesel engine based generators that provides power to an 11 kV distribution network, with underground 11kV cables and distribution substations to provide power to the sewage pump stations and water reservoir.

The GRC have three main sewage pump stations, and a communications facility at the portable water reservoir located on the island, powered by this 11kV Power Supply System, with substations located at each sewage pump station and adjacent to the potable water reservoir site.

The 11kV Power Supply System is maintained and monitored by the GRC. Programming of the main PLC and HMI, as well as the substation RTUs and HMIs, was undertaken to provide remote access for the GRC SCADA system, to monitor and control all these substations and the diesel generators via a radio link.

Project Specifics

Client	ODG Haden
Location	Curtis Island QLD
Year Completed	2014
Size / Quantities	2 x 800kVA Diesel Generators 1 x 800kVA Substation 3 x 250kVA Substations PLC/RTU Control and Radio Communication System
Services Provided	<ul style="list-style-type: none"> Preparation of Control Functional Specification Programming of main system PLC & HMI Programming of substation RTUs & HMIs FAT of PLCs, RTUs & HMIs Site commissioning of PLCs, RTUs & HMIs
Delivery Method	Electrical Engineering Consultant