



Ergon Energy

Gladstone North 132kV Bulk Supply Substation

Background:

To cater for the expanding industrial development and port facilities to the north of Gladstone, Ergon Energy decided to establish a major bulk supply substation to be supplied directly from the adjacent Gladstone Power Station.

This was to be Ergon's first 132kV substation in Qld and consisted of four bays in "Breaker and a Half" circuit configuration, two 80MVA transformers and six outgoing 66kV bays, as well as a Ripple Controller.

Outgoing bays from this substation would also supply the new Port Curtis 66/11kV substation adjacent to the Gladstone Ports Corporation to cater for the expansion at this facility.

Welcon designed both substations in parallel with design documentation delivered in stages to meet the tight project schedule and installation methodology.

Project Specifics

Client	Ergon Energy
Location	Gladstone, QLD
Year Completed	2007
Size / Quantities	132/66kV; 2 x 80MVA Transformers
Services Provided	<ul style="list-style-type: none"> • Primary Design and Layouts • Switchyard Materials Selection • Earthing & Lightning Design • Secondary Systems Design • Protection Scheme • Auxiliary Power Systems • Full Detailed Drawings • SCADA & Communication Panels • Protection Relay Settings
Delivery Method	Design Consultant for Constructor