



CASE STUDY >

INSTALLATION AND COMMISSIONING OF LIEBHERR EXCAVATOR CHARGING KIOSKS

PROJECT OVERVIEW

The Solomon Hub comprises the Firetail, Kings Valley and Queens Valley mines which together have a production capacity of 75mtpa.

SCOPE OF WORK

RSGx has partnered with Fortescue to deliver a number of complex scopes, this being the first of its kind in Australia.

Fortescue has sourced 3 x Liebherr R9400E Electric excavators to be installed at their Solomon Mine site.

Scope of Works is associated with providing 6.6kV power supply for E-Digger operations. The scope includes

- ♦ Installation of poles and spur line from 33kV backbone including a 33kV underground line and burying the fibre optic cables in conduit.
- ♦ Installation of pole mounted reclosers and pole mounted ABS.
- ♦ Installation of skid mounted 33/6.6kV kiosk substations that consists of a 4MVA transformer, a 6.6kV switchboard with associated protection equipment and SCADA and communications equipment for protection, monitoring, and control for energy operations.
- ♦ Full testing and commissioning of the pole mounted recloser and 33/6.6kV Kiosk substations and in-pit mobile 6.6kV field switches.
- ♦ Site acceptance testing (SAT) for in-pit mobile 6.6kV field switch and 33/6.6kV kiosk substations.
- ♦ Modify existing poles on the main 33kV backbone distribution, during shutdown and tie into existing 33kV network.

ACHIEVEMENTS TO DATE

The project was completed injury and incident free. Mobilisation of all personnel was achieved within 4 weeks. The shutdowns were completed on time and in shift windows with no disruptions to operations. Energisation of 3 x 33/6.6kV Kiosk Substations and 2 x In-pit mobile 6.6kV Field Switches were delivered safely and on time.

CLIENT
FORTESCUE

SERVICES PROVIDED
INSTALLATION AND
COMMISSIONING OF 33KV KIOSKS
AND 33KV OVERHEAD LINE

SCOPE
CONSTRUCTION
COMMISSIONING
COMPLETIONS

INDUSTRY
MINING

LOCATION
SOLOMON MINE, WESTERN
AUSTRALIA

