



## 33 – 3.3kV New Switch Yard Replacement project BHP GEMCO Pty Ltd - Groote Eylandt , Northern Territory

**Client:** BHP GEMCO Pty Ltd

**Date:** 2015

### SCOPE

This project includes the design, manufacture and supply of a new fabricated HV Switch Room, new 33kV and 3.3kV Switch Boards and associated Balance of Plant equipment and all associated power and control cabling, fixtures and conduits as required for the complete installation of the switch room at the new facility.

The new HV Switch Room has been designed and manufactured to accommodate for the harsh conditions of operation on Groote Eylandt combined with the rigors of Mining operations. The Power and Control equipment selected is of high quality, to specifications equally fit for the purpose.

The Switch Room and Power systems are factory tested before shipping and then site tested again to the final commissioning process. The final commissioning process is conducted in conjunction with i.Power Solutions and the Client. As i.Power Solutions maintains a small workshop facility and staff on Groote Eylandt, commitment to the warranty and defects liability period is a high priority with i.Power Solutions able to offer a round the clock service to the client as required.



### A brief overview of the contract includes:

- Design of the new Switch Yard system including full scoping, engineering and auditing and provision of Detailed Design.
- Supply and Installation of :
  - 1 x Custom designed and manufactured HV Switch Room including Light and Power, Air Cond and Fire systems. Also includes landings, mounting stumps, stairs and hand rails.
  - 33kV and 3.3kV Switch Boards incorporating all power control including circuit breakers, protection, monitoring and PLC equipment UPS system, DC Trip Supplies and other associated Balance of Plant.
  - Installation of all Power and Control Cabling from Switch Room out to the field devices and any other associated systems.
- Site Testing and Commission of the CH-100 Switch Room and all other associated equipment and systems.
- Site Documentation package

### OUTCOMES

Design, manufacture, install, testing and commissioning of new Sub Yard Switch Room and associated HV Switch Boards for the Manganese Concentrator facility at BHP GEMCO Manganese Mine..

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SOLUTIONS

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