DEGNAN

# CORINDA FEEDER STATION

The Corinda Feeder Station project is the upgrade of a 25kV traction feeder substation.

TYPE OF PROJECT:
Energy

LOCATION:
Brisbane, QLD
Yuggera & Turrbal Country

CLIENT:
Queensland Rail

PROJECT COMPLETION:
May 2025

PROJECT VALUE:
$5.5M

DELIVERY MODEL:
Construct Only

SCOPE:
Civil, Structural, Reticulation Systems, HV Cabling and terminations, Earthing, LV Systems, HV Cutovers.

The Corinda Feeder Station upgrade was required as the substation equipment had reached end of life. Upgrades were required to improve reliability, maintenance and system resilience. The overall scope included:

- A new prefabricated switchroom, containing 25 kV gas insulated switchgear and associated ancillary equipment.
- Associated civil and structural works to accommodate the new switchgear building.
- New Isolation Transformer and associated civil works.
- New transformer cable sealing end masts, interfacing between the existing 25 MVA 110/25 kV transformers and the new prefabricated switchroom
- New track feeder sealing end masts, interfacing between the OHLE and new prefabricated switchroom
- Upgraded earth grid New lightning protection systems
- New cable reticulation systems including new trenching, pits, conduit routes, cable tray

Transformers and HV switchgear was free issued and commissioned by QR. A collaborative approach was required to project execution to maintain a tight project schedule.

Most of the project works were to be delivered while the substation was operational, with minor outages for cutovers. To facilitate this, the project took a systematic approach to staging and cutovers. New assets including the prefabricated and tested switchroom were installed in a new footprint within the site where works preparatory works could be safety executed. During this period there was clear delineation of isolated and live assets. This allowed infrastructure to be installed and tested onsite prior to planned cutover periods that were done during periods where the substation was isolated. An additional challenge was the presence of a live 110kV Energex cable running through the QR Substation. Due to the presence of this cable, careful planning of works was required to ensure the integrity of the cable was not compromised. This included vibration monitoring during civil works and exclusion zones for heavy machinery operating in the vicinity of the cable.