CROSS RIVER RAIL
CASE STUDY

POWERING A CITY WIDE RAIL NETWORK

The Cross City Rail project delivers a resilient electrical infrastructure network to support continuous rail operations across a complex, multi-station urban environment. High-voltage systems are designed around dual-feed supply arrangements and strategically located substations, providing secure power intake, transformation, and distribution across the network. This architecture ensures operational continuity, fault tolerance, and long-term capacity to meet peak demand and future service expansion.

CAPACITY:

160kV MAXIMUM INCOMING SUPPLY

TRACTION:

52MW STATION PEAK LOAD

SYSTEM INTEGRATION

- 15,000+ LIVE ELECTRICAL & SYSTEMS DATA POINTS MONITORED
- 1 UNIFIED SCADA PERFORMANCE ACOSS HV, LV & STATION SYSTEMS
- < 2 SECONDS AVERAGE SYSTEM RESPONSE TIME

HIGH VOLTAGE VENTILATION SYSTEMS

PROJECT OVERVIEW

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Low-voltage systems underpin the daily functionality of stations, tunnels, and operational facilities, supplying power to lighting, communications, safety, and passenger amenities. Zoned distribution and intelligent control enable efficient energy management, simplified maintenance, and rapid fault isolation without service disruption. Together, the HV and LV systems form an integrated, end-to-end electrical solution engineered for safety, reliability, and the long-term demands of a growing city.

supporting
essential
services