

Powering Sydney's Westconnex

Ampcontrol is helping to ease congestion and connect communities by powering Sydney's WestConnex, the largest transport infrastructure project in Australia.

Design, supply and commission

Ampcontrol undertook the design, supply and commissioning of a complete electrical system from Ausgrid's 11,000V (11kV) point of supply, to surface and underground facilities across the new M4 WestConnex tunnelling sites.



What we did

Our solution included engineering support and management of the supply connection from Ausgrid including development of the required Installation Safety Management Plans. As part of the design, we undertook engineering studies such as load flow, fault levels, electrical protection and power factor correction as well as earthing design and verification for all sites, underground and surface.

In addition to the front end solution engineering on the electrical system we supplied and commissioned electrical equipment including around 40,000 metres of 1,000V rubber cables and 20,000 metres of 11kV cable. This connects the electrical supply to approximately 40 roadheader tunnel excavators, five of which were electrically refurbished by Ampcontrol in Newcastle prior to being sent to site.



Hire fleet allowed speed and flexibility

To get the project up and going quickly and efficiently all electrical equipment and cables were supplied on a hire contract. Drawing on Ampcontrol's extensive fleet of refurbished and new power distribution equipment, this hire package provided flexibility and reliability without compromising on quality, safety or engineering design.

The equipment supplied was fully supported by HV operator familiarisation training, site acceptance testing of surface equipment and ongoing site audits to ensure correct operation and minimal downtime for the project.

