

Open Cut Substations



NEPEAN Power provides engineering design, project management, manufacturing, commissioning, training and ongoing lifestyle management services. Our extensive experience in engineering and design as well as the ability to manufacture quality equipment, allows us to provide solutions from minor projects through to large turnkey infrastructure.

From concept stage, we engage and listen to your requirements. Through our proven industry experience NEPEAN Power ensures getting the best possible solution for your requirements, not just for today, but for the life of the site.

ELECTRICAL & ELECTRONIC DESIGN & MANUFACTURING EXPERIENCE BUILT UP SINCE 1994

NEPEAN Power designs and manufactures world class power distribution equipment such as relocatable open cut substations. Substations have been developed specifically for the arduous conditions of open cut mining. They are suitable for powering heavy plant and machinery including draglines, shovels and drills in coal, metalliferous and sand mining operations.



Open Cut Substations

High Voltage Switchgear

The switchgear is positioned on the roof of the switchroom with the operating mechanisms located on the side of the room allowing easy access for personnel. The HV circuit breaker can be mounted on the front or rear of the substation. Surge diverters are mounted on the incoming supply and the load side of the isolator.

Transformer

Transformers ranging from 2MVA to 30MVA in various combinations of primary and secondary voltages, dependant upon specific needs, can be included. NEPEAN's standard Open Cut Substation includes earth fault current limitation, provided by continuously rated neutral earthing resistors to the Star point of all secondary windings. Neutral resistor monitoring, and earth leakage relays are installed as standard equipment on each secondary neutral, tripping directly to the main HV circuit breaker.

Switchroom

NEPEAN Power's switchrooms are constructed to comply with our customer's specifications, and can be fitted with air-conditioning and fire suppression. The switchroom configuration is adapted to suit the circuit breakers, protection relays, and other requirements specified by the customer. External remote controls are installed to give added security and controlled access to the equipment inside, allowing for safe operation. Medium voltage outlets with bolted adaptors are located at a workable height; alternate cable boxes may be installed on customer requirement. Viewing windows are provided for safe inspection of the MV equipment.

Benefits of NEPEAN Designs

Local Experience

- Australian designed with local knowledge
- Capability to manufacture locally or globally increases price competitiveness

Flexible

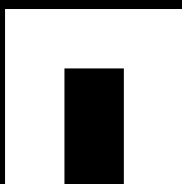
- We focus on listening to our customers and asking the right questions to continually reach better outcomes
- Reduced site installation time
- Shorter lead times with a full in-house capability to manage the project from concept to commissioning
- Adaptable in design to incorporate individual specifications

Built Safe & Easy to Use

- A proprietary fire detection and suppression system can be fitted. Also included is an audible alarm, warning signs and extinguishers
- Optional galvanised metal skid base or wheel mounting for ease of transportation
- Optional crawler tracks allow easy relocation and manoeuvrability
- Manufactured to comply with mining and power authority regulation requirements as well as relevant Australian Standards

NEPEAN IS AUSTRALIA'S LARGEST

70% of Australian mines have invested in NEPEAN equipment and services across our Longwall, Power and Conveyor product offerings. NEPEAN Power is the large scale electrical and electronic projects arm of NEPEAN Mining, NEPEAN Mining is a division of NEPEAN™, Australia's largest privately owned engineering, mining services and industrial manufacturing organisation. NEPEAN Conveyors, NEPEAN Power and NEPEAN Longwall provide an extensive portfolio of products and services to independently deliver unique, high quality results, or united, NEPEAN offers a one stop mining solution.



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For more information please contact:

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