

PETROCHINA OVERSEAS MINING SUBSTATION WITH PREFABRICATED TRANSFORMER UNIT



About us

Nengfu Electrical is a company specializing in providing efficient and reliable electrical system solutions and engineering services. We seize opportunities in the development of new power systems and drives digital transformation across the energy sector.

PROJECT BACKGROUND

This project aims to support PetroChina's overseas mining operations by providing a reliable, efficient, and modular substation solution. The core component is a containerized prefabricated transformer substation (box-type transformer), designed to suit remote or rugged environments typical of mining sites.

Scope of Supply

- Box-type transformer substation (up to 35kV or per requirement)
- High-voltage switchgear & protection system
- Integrated control, monitoring, and SCADA interface
- Cooling and insulation systems suitable for harsh climates
- Civil base or skid-mounted installation
- Transportation, on-site commissioning, and training



NENGFU'S CONTRIBUTIONS



Key Features & Advantages

- Modular & Mobile: Factory-assembled for quick deployment and easy relocation
- Durable: Designed for extreme temperatures, sandstorms, and altitude differences
- Efficient: Compact layout reduces footprint and civil work requirements
- Safe: IEC-compliant protection system and fault detection
- Smart: Remote monitoring and diagnostics supported

Application Scenarios

- Remote mining areas
- Temporary or permanent field power stations
- Oil & gas extraction sites
- International EPC projects in challenging environments

Value to Client

- Reduced installation time and cost
- Enhanced reliability of power supply in critical operations
- Standardized, repeatable solution across multiple sites
- Lower lifecycle cost through integrated monitoring and modular maintenance

