

ABOUT US:



RJE Global (RJE) is an Australian-owned engineering, manufacturing, logistics and construction company that was established in 1996. With over 350 employees, we provide everything from in-house Engineering at our Head Office in Morphettville South Australia, to Manufacturing at Lonsdale South Australia and Construction offering both within Australia and Internationally having offices in Myanmar, Beijing, Batam, Mongolia and Singapore. RJE Global offers full range of freight and heavy haulage equipment to compliment the construction and manufacturing projects that we manage.

DEFENCE CAPABILITY

Engineering and Design:

RJE Global provides engineering and design services for Modular Facilities including Electrical Infrastructure, Instrumentation, Communications, Mechanical, Structural and Civil works. Our design team now consists of over 50 engineers and drafters.

Manufacturing:

RJE Global purchased a 25,000m² facility in August 2009, to provide a manufacturing base for the entire RJE operation, enhancing our in-house capabilities. The manufacturing and storage facility is located at Lonsdale South Australia where our Modular Facilities are built and tested prior to delivery.

Logistics:

RJE Global Modular Facilities can be delivered by LAND, SEA or AIR. For LAND delivered projects, RJE Global use our own freight and heavy haulage equipment. Our modular facilities can be transported in single modules up to 30m long x 7m wide x 4.5m high.

Construction:

RJE Global provides construction and installation services for Modular Facilities including Electrical Instrumentation, Communications, Mechanical, Structural and Civil works. We have experienced Supervisors and Construction Managers who ensure RJE's standards, and our clients site requirements, are met.



CONTACT

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RJE Global Pty Ltd

COMPETITIVE DISCRIMINATORS

- In-house Australian Engineering, Manufacturing, Construction and Logistics for complete Supply Chain Security
- Up to 30m long x 7m wide single sections
- Composite panel, limit site construction
- Innovative and smarter
- Unique construction techniques
- RJE utilise existing and proven Glass Reinforced Concrete (GRC) construction techniques to meet physical security requirements and meet audio security level for amplified sound areas
- Delivered as a plug and play system to support rapid operational needs globally
- Past project - designed, built, delivered and installed SICF in a short time period of only 10 weeks.

PRODUCT

- Secure / Modular / Deployable / Demountable / In-Situ / Transportable Facilities
- Sensitive Compartmented Information Facilities (SCIFs)
- Zone 4 / Zone 5 / Top Secret areas
- Blast / Ballistic / Attack / Fire / Cyclone rated facilities
- Data centres
- Communication/Switch rooms
- RF shielded facilities

PERFORMANCE

- ASIO T4 Tech notes 1/15 and 5/12
- 4h Fire Rated
- ASIO Tech Note 1/06 Acoustics Dw50
- Tamper evident finish
- RF 80db @ 70MHZ - 5GHZ (MIL-STD-285)
- Manufactured in South Australia at own premises
- Customised solutions to suit each project specifications
- Designed in-house for smarter construction
- 400+ FTE
- Site construction and installation.

KEY CUSTOMERS

- Department of Defence
- Prime Contractors
- Specialist Support Sub-Contractors
- SME's.

CERTIFICATIONS / ACCREDITATIONS

- ISO9001:2015 Quality Certification
- AS4801:2001 Safety Certification
- OHSAS18001: Safety Certification
- ISO14001:2015 Environmental Certification
- Federal WHS Accredited
- SA Export Award Winners.



RJE



RJE Global Capability Statement

Established in 1996, RJE provides multi-discipline engineering and construction services to complex projects across a diverse range of industries including, Mining and Renewable Energy, Light Rail, Communications, Power and Utilities, Power Generation & Distribution, Transport & Infrastructure.

RJE can custom package high & medium diesel generators up to 4MW to suit customer requirements & integrate them in to a power station for mining & site both in Australia & abroad.

The below summary lists projects and gives a brief description of project site and works completed by RJE, additionally we have supplied project summaries to highlight RJE's capabilities.

RJE Global are a progressive and innovative Electrical Engineering and Construction Organisation. Our Projects are often in remote areas and overseas.

Our Head Office is located at Morphettville (7 km from the Adelaide CBD) and our main manufacturing facility is located at Lonsdale (20 Km South of Adelaide CBD) on a 25,000m² site.

The Manufacturing Facility is dedicated to the manufacture & assembly of modularized electrical & process skid mounted & housed solutions including transportable switchrooms.

RJE Global consists of a dynamic team of people (350+ permanent employees) including experienced Project Managers, Engineers, Designers and Construction personnel with extensive knowledge in the HV (High Voltage), MV (Medium Voltage) and LV (Low Voltage) electrical disciplines encompassing power, instrumentation and control systems.

We provide everything from initial ideas to full operations both within Australia and Internationally. Through our diverse service offering and products, we can provide 'turnkey' solutions, as well as everything in between.



RJE's in-house service capabilities include, Electrical, Civil and Mechanical Engineering & Design, Power Systems and Protection Design, Modular Transportable Switchroom Construction, Offsite Plant Packaging, Industrial and Mining Construction Works, Wind and Solar Farms with battery support, Process Plant and fuel handling systems, Power System & Mining Equipment Testing & Commissioning, Heavy Haulage and Asset Management.

RJE's core business activities involve the Engineering, Design, Project Management and Construction of HV, MV and LV Electrical installation of Power, Instrumentation and Control works including BOP and fuel handling systems.

To complement our Engineering Design and Construction core works, we also offer a range of services and equipment to assist in analysing power systems, design, construction, testing and commissioning.

Within RJE's fleet of equipment we own and operate franner cranes, telehandlers, tip trucks, excavators, track trenchers, specialised Cable hauling, winching and stringing equipment and civil plant operated by our experienced staff. Electrically we own and operate a large suit of equipment inclusive of specialised HV testing apparatus such as VLF tester, Omicron injection test equipment, electrical cable fault location equipment, and fibre optic joint and testing equipment.

ACCREDITATIONS, AWARDS & DISTRIBUTORSHIPS

- ISO 9001:2015 Quality Certification
- ISO 45001:2018 Safety Certification
- ISO 14001:2015 Environmental Certification
- Federal Safety Accreditation
- cM3 Certified
- Achilles Certified
- 2016 Manufacturing Exporter of the Year
- 2018 Asian Exporting Awards
- Distributorship for GE Transportation MS&D, Stationary Power Medium Speed Diesel Engines in Australia, Myanmar & Mongolia



ENGINEERING AND DESIGN

RJE can provide the following Engineering and Design Services:

- Power System Modelling (Utilising EDSA Software)
- Power System & Substation Design
- Protection System Design to latest International Standards
- Electrical and Instrumentation Process Plant Design
- Mechanical and process design
- Motor Control Centre (MCC), Switchboard, Control Panel Design
- SCADA & PLC Design including Process Function Descriptions
- Outdoor HV Substation Design
- LV, MV and HV Protective System Design
- Hazardous Area Electrical & Instrumentation Installation Design
- Transportable Substation Design and Fit-out
- 2D and 3D Drafting utilising AutoCAD and Solid works drafting packages
- Earthing System Design, Installation and Testing
- Certified Civil and structural designs

TRANSPORTABLE SUBSTATION/ SWITCHROOM DESIGN & CONSTRUCTION

RJE Transportable Switchrooms have been specifically developed for use in harsh environments for the mining, petro chemical, power generation and utility sectors incorporating the following features:

- In-house structural, mechanical and electrical design and construct.
- Cyclone and Blast rated designs
- Air Conditioning design and installation
- Complete Electrical and Communications design, supply and installation
- Fire detection and suppression systems
- In-house Freight and Logistics

RJE Transportable Switchrooms offer a unique solution utilising Glass Reinforced Cement (GRC) Panels to form the wall and roof sections of the buildings. The GRC panels offer inherent fire ratings, acoustic and chemical/corrosion resistant properties in its standard format.

RJE have experienced Construction Supervisors and Managers who ensure RJE's standards and all client site requirements are met.



ELECTRICAL CONSTRUCTION

RJE construction personnel have many years of experience in the following areas:

- Underground Mine site Electrical and Instrumentation Construction
- Overhead HV line construction & modification
- HV Cable Inline Joints & Terminations up to 33kV
- HV Outdoor Substation Construction
- Transformer Installation and Termination
- Large MCC, Switchboard, Control Panel and VSD Installation
- Instrumentation Installation
- Transportable Switchroom Construction and Installation
- Underground Cable Installation (major trenching works)
- Electrical & Instrumentation Commissioning and Testing
- Electrical & Instrumentation Installation in Hazardous Areas
- Installation of Earthing Systems
- Cable Ladder and Tray Support Systems Installation
- Large and Small Cable Hauling, Reeling, Laying and Winching Systems

POWER GENERATION BOP AND FUEL SYSTEMS

RJE have achieved significant recognition within the power generation industry for delivering modular, packaged diesel fuel and lubrication systems:

- The Fuel BLOCK 50, a single 14.5m x 3.6m module capable of fuel unloading, treatment and delivery to a 50MW turbine. The module and piping systems can be installed, connected and commissioned in less than 5 days
- Filtration and water separation solutions using bag and depth elements, coalescing separators and disk type centrifuges
- Diesel fuel particulate removal performance from ISO code 22/--/-- to 15/13/10 in a single pass
- Fuel washing techniques for removal of light metal contaminants
- Back-flush filtration systems for barge and tanker unloading or contaminated bulk fuel supplies
- Waste oil and fuel recovery techniques for cost effective reduction of waste fluid volumes
- Remote access enables RJE automation engineers to monitor operation and make software changes
- Fully designed, fabricated and tested in Adelaide, South Australia

PROCESS PLANT CONSTRUCTION

RJE construction personnel have many years of experience in the following areas:

- Remote site preparation, facilities set-up
- Surveying, easement and buried services identification
- Structural steel fabrication and site assembly
- Mechanical equipment installation
- Piping fabrication, installation and tie-ins
- Electrical earthing, lightning protection and lighting installation
- Electrical equipment and cabling system installation
- Instrument installation and hook-ups
- Pre-commissioning and commissioning management
- Construction, commissioning and completions database systems
- Safety management and development of plant Safe Systems of Work
- Quality assurance systems

ASSET AND MAINTENANCE MANAGEMENT

RJE Global is acutely aware that across all sectors of engineering, including rail, infrastructure, utilities, and industry, the design of systems and equipment is becoming more complex and critical to stakeholders. This has resulted in the increased need for effective maintenance strategies to analyse and predict future reliability performance of infrastructure facilities and assets.

RJE Global has realised the need to provide clients with fundamental maintenance reliability engineering concepts such as:

- Reliability Centred Maintenance (RCM)
- Condition monitoring
- Risk Based Inspection (RBI)
- Failure Modes Effects and Criticality Analysis (FMECA).
- Functional failure and standardised maintenance strategies
- Effective reporting including Engineering oversight and professional services
- Continuous Improvement strategies

RJE Global can provide clients with maintenance and reliability principles to analyse and predict future reliability performance whilst developing appropriate risk based cost effective maintenance strategies to suit individual needs.



RJE FACTORY AND MANUFACTURING FACILITY

RJE own and operate its manufacturing and assembly works from a 25,000m² site in Lonsdale, South Australia, 2,000m² of undercover storage facilitates the office, stores and workshop where Electrical Panel wiring and assembly take place and 6,000m² of concrete hard stand for staging and assembly of Electrical Skids, Switchrooms and Equipment. In addition to this, RJE have a further 4,500m² of undercover factory space that houses a steel fabrication workshop, sand blast and Paint booth along with 125m² of mould beds for casting GRC panels.

The RJE Factory can do although not limited to the following Manufacture of:

- Battery chargers
- AC Distribution Boards
- High Voltage Protection Panels
- Control and marshalling panels
- Mini skid mounted substations Balance of plant
- Assembly, staging, pre-commissioning and load testing of switchrooms, skid mounted solutions, diesel generation set and fuel handling systems
- Steel Fabrication Work Shop of mild and stainless steel
- Blast and spray of paint protection systems
- GRC moulding for panels, roof systems and structures
- Fabrication and assembly areas for Stainless steel pipe spools and tanks
- Blast facilities to meet AS 1627.4 class SA 2.5.
- Industrial and protective coatings to high stringent specifications
- In-house Nace Coating Inspector Level 1 and member of Australasian Corrosion Association.

HIGH VOLTAGE, POWER GENERATION AND POWERLINE PROJECTS

33kV Undersea Cable to Kangaroo Island

- Design and factory inspection of 16+ kilometres of specialised 33kV undersea cable, for installation between the mainland and Kangaroo Island, for end client SA Power Networks
- On-shore installation of cable, including design, fabrication and installation of 33kV termination structures

PNG 66kV Skid and Fuel BOP GE TM2500

- Supply 66kV grid connect modular substation
- Supply and install fuel BOP systems

Gorontalo Power Station BOP GE TM2500

- Supply Fuel cleaning and storage systems
- Site installation management

Weno Power Station, Chuuk, Micronesia

- Design and construct 4MW Power station to power a small island in the Pacific Ocean.
- Full Turnkey Power Station Designed, delivered and installed in house.
- 2 x RJE Packaged 2MW Diesel Generation sets
- 1 x 18.5m Switchroom with MV distribution, Monitoring and Generator Control.



Appin Vent Shaft 6 BMA

- 66kV Substation, Switchyard
- 66kV Substation control Room

Crowlands Windfarm

Electrical Balance of Plant Contractor. Design, Manufacture, Procurement, Construction and Commissioning of:

- 220kV/33kV Substation & Switchyard. Inc. Supply and Install the Main Transformer and all Primary/Secondary Equipment
- Manufacture, Supply and Install the 33kV Switch Room, Substation Control Room, Protection and Scada System
- 25kms of Underground and 16kms of Overhead 33kV MV Cable and Fibre Optic Communications Reticulation System. Inc. Helicopter Stringing OHL Conductor, Cabling Terminations and Joints
- Manufacture, Supply and Install 40 Wind Turbine Transformer/RMU Kiosks
- 690V LV Cabling between Wind Turbine and Transformer Kiosk
- Wind Turbine and Substation Earthing System

HNA Defence Base Power Line

- 66kV Design Substation, Switchyard inclusive of HV infrastructure, control and protection system
- 66kV Power Line at Edinburgh Defence and RAAF Base Edinburgh, disconnect and reclaim 10km of overhead line, decommission poles and equipment, design and install new 1.6km line

Pine View Poultry

- 11kv Power line extension
- Pranharn Road Dublin Overhead
- SWER line and pole top transformer installation
- LV connections and overhead supply

Honeymoon Mine site 22kV OH supply

- 130km OH 22kV line and Transformers
- Mine site MV Reticulation

Newcrest Cadia Power Supply

- 32kv UGOH Poles and re-stringing 132kv line
- Design, supply, installation and commissioning of approximately 4.8 km per phase of single core 132kV 630mm², copper, XLPE cable (14.4 km of cable in total), plus a single fibre installed underground in 200mm conduits, joining pits and link boxes. Works was routed through commercial and residential areas of the City of Orange NSW

Nova Nickel Mine Site, Western Australia

- 5 x 4MW unenclosed Diesel Generation sets
- 1 x Switchroom for MV reticulation and Generator control, monitoring and operation



Windfarms with substations designed and installed by RJE, HV reticulation and terminations

- Portland WF, Vic
- Snowtown WF, SA
- Emu Downs WF, WA
- Lake Bonney WF, SA
- Taralga WF, NSW
- Waubra WF, Vic
- Hallett Hill WF, SA
- Collgar WF, Vic
- Many other windfarms throughout Australia

TransGrid / Siemens 66kV Substation

- Design and construct a switchroom to house 18 tier Siemens GIS Switchgear and transport in completed section to Orange, NSW
- Installation assistance for the 66kV GIS switchgear alongside Siemens experts

LARGE E&I PROJECTS - MINING

Rio-Tinto, Parkes

- UG crusher, reticulation, overland conveyor, control and commissioning systems

Argyle Diamond Mine

- Rio-Tinto, Argyle Diamond Mine UG crusher 1 and 11kv reticulation
- Rio-Tinto, Argyle Diamond Mine UG crusher 2 and mine development construction
- Underground mine High Voltage Distribution network and E&I Material handling system including UG Crushing, Dewatering Pumping Stations, conveyors and Fibre optic networks along with ADM Ongoing Service Agreement Works, providing Engineering, electrical and supervision services to Argyle Diamond mine for Project works and to supply electrical services to supplement existing ADM crews when required.

Iluka, Jacinth Ambrosia Mineral Sands Mine

- Process E&I, HV reticulation, Mining electrical infrastructure

Nyrstar Port Pirie

- HV reticulation, Switchrooms and E&I installation

Newmont Tanami Expansion works

- Tanami expansion Project, Switch rooms and infrastructure upgrades



Birla Nifty Copper mine

- Underground Crusher and Conveyor installation

ABC Hartley Quarry

- Design and construct Crusher and conveyor system
- Switch room, Control Cabin, all electrical and instrumentation installation.

BHPB EP5 Tailing ponds pump station

- Multiple D&C UG Vent Fan E&I installation across the country

OZ Minerals, Prominent Hill Mine Site, South Australia

- MV Reticulation, UG Mine Transportable substations and MV UG Infrastructure include cable droppers.

Oyu Tolgoi Mine Site, Mongolia

- 10.5kV Electrical Upgrade - Installation of Catenary hanger system, installation of Cabling, Joints, RMU units, Transportable Substations, Fibre Optic Cable installation, Surface Water HDPE pipe upgrades and installations, small light and power upgrades

GENERAL BHPB, BMA PROJECTS

Olympic Dam

- Olympic Dam, Tailings Disposal Unit, 11kV feeder installation for new tails disposal pumping station. Consisted of nylon/PVC/SWA/PVC/XLPE, installation length being 720m through a combination of existing live plant pipe bridges cable ladder and direct buried underground to new location.
- Primary Ventilation Fan RB44
- VVVF Cyclone Feed pump change out
- Copper SX project

Hay Point Coal Handling

- Supply of Switchrooms x 21
- Site commissioning
- Site Installation assistance

Appin BMA #VS 6 Ventilation Fan

- Supply and installation of 3 x switchrooms
- Site works connecting 3 x 5.2mW motors and instrumentation
- HV cabling from upstream switchyard to fan site

Cliff Nickel BHPB

- Installation of UG Automated Vent doors
- Installation of Primary Ventilation Fan

VARIOUS SMALL SCALE PROJECTS

- Adelaide Air Port HV installations
- Flinders Ports Container terminal HV upgrade and electrical support
- Various Shopping Centre HV upgrades (Colonnades, Marion, Arndale)
- HV Maintenance projects
- Sports Field lighting i.e. Glenelg SANFL lighting and smaller regional ovals
- HV infrastructure support, i.e. SA Water
- Adelaide Light Rail Upgrade (Tram Substations)
- Adelaide Rail Network (Train Substations & HV Installation Support)

AIRPORT AND DEFENCE WORKS

In recent years RJE have completed several projects at Adelaide Airport both direct to AAL and 3rd party builders, such works include high voltage cable alterations, high voltage switching, maintenance and new high voltage works including installation of new high voltage ring main units for distribution of power RJE have also completed alterations to street lighting both air side and non-air side inclusive of civil and electrical portions.

In previous works RJE complete the 66kV substation upgrade as part of the Hardened Network Army (HNA) works. The scope of the works undertaken by RJE was for the Design construction of the following equipment; two 66kV switchyards bays, ISS1 and ISS2, Protection and control of a 66/11kV transformer, off 66kV transmission line linking ISS1 and ISS2.

HQJOC, Bungendore/Queanbeyan NSW, 20km Dual 11kV UG Mains supply Circuit to supply the Australian Defence force Headquarters Joint Operations Command and installation and commissioning associated with all of the HV Infrastructure on site.

ASSET AND MAINTENANCE MANAGEMENT

DEWNR Patawalonga Lake System (PLS)

The PLS is a complex system designed to circulate sea water through the Lake on the rise and fall of the tide, and divert stormwater upstream of the Lake to the sea to keep the Lake safe from pollution and to mitigate the potential for storm water to flood Glenelg North and Adelaide Airport. The PLS is a fully automated system that is operated manually 10% of the time especially during extreme weather.

Our scope – the onsite management, operational control and maintenance services.

Our key management objective include:

- maintaining the Lake quality as an icon of South Australian lifestyle and tourism;
- mitigating potential flood risk to adjacent properties at Glenelg North and adjacent Adelaide Airport;
- operating and maintaining in a safe manner at all times (Public Safety);
- operating and maintaining in an efficient manner so that best services are extracted from the facility and the asset life cycles are improved (Efficiency); and
- operating and maintaining in accordance with or better than the established service specifications and standards (Continuous Improvement).

We have provided breakdown attendance, repair, refurbishment and replacement of plant and equipment, and also provide emergency support to DEWNR, State Emergency Services (SES) and Primary Industries and Regions SA (PIRSA) when needed. (e.g. for flood and toxic water mitigation).

For additional information of the above projects please refer to the project profiles in the attached files.

COMMISSIONED SMARTER

DELIVERED SMARTER

BUILT SMARTER

DESIGNED SMARTER

RJE

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