



**Power Control Engineers** Pty Ltd  
**Specialist Electrical Engineers**  
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## Specialist Areas

- Power Distribution Systems
- Switchgear Systems, Circuit Breakers and Protection Schemes
- Electrical Asset Management
- Reactive Power Compensation and Harmonic control
- Power Quality
- Earthing Systems
- Transformer Systems
- Motor Control and Variable Speed Drives
- Process Control and Automation
- Machine Guarding, Safety systems and Interlocking

## Services Provided

- Detailed Design of Electrical Systems
- Equipment Procurement and Installation
- Plant Commissioning
- Performance Studies on Existing Electrical Systems
- Plant Load Studies
- Protection System Testing
- Transformer Monitoring and Protection
- Power Quality Studies
- Reactive Power Assessments
- PLC Automation Systems Programming
- Retrofit and Refurbishment of Medium Voltage Switchgear
- Drafting of Layouts, Line Diagrams and Schematics
- Drafting of Connection Diagrams and Cable Schedules

## Proprietary Products

- Remote Circuit Breaker Racking Device
- Custom Sine Wave Filters



## List of Recent Projects

Customer	Project	Scope
Camberwell Coal Singleton	Coal washery upgrade for Roberts & Schaeffer	Electrical design including switchgear replacement and VSD pump drives
EMA - Bartter Enterprises Beresfield	Rendering plant conversion to a load out facility	Project management, switchgear design and replacement
	Load Out Facility	Upgrade of electrical switchgear and reticulation
	Installation of new pluckers in the chicken processing line	Design and PLC control, installation and project management
Sanitarium Health Foods – Cooranbong	Power Survey	Survey of power consumption and proposal for increasing power to compressor house.
	Compressor House power supply	Design, supply and installation of upgraded power supply to compressor house
	Light and Tasty production line	Design, supply and installation and commissioning of MCC and PLC control of new production line
Delta Power – Vales Point PS	Circuit breaker racking device	Design, supply and commission remote circuit breaker racking device
Holcim Cement – New Zealand	Remote circuit breaker operating device	Design supply and commission remote circuit breaker operating device
Rutherford Power – Tomago	Switchgear Arc Vent	Design of arc vent for switchgear in compliance with Coal Mining requirements
Thomas & Coffey – Newcastle	Tomago Aluminium Computer centre.	Design of earthing and lightning protection for new Tomago Aluminium Computer centre.
Worley - Tomago Aluminium	Anode stacking crane hoist upgrade	Design install and commission VSDs on anode stacking crane hoists
	Paste plant cooling tunnel – Machine guarding	Design, installation and commission of safety access and machine guarding to AS4024
	Electrical isolation	Plant wide upgrade of electrical isolation
	Mobile Earths	Upgrade and replacement of mobile earth units including new telemetry system
Hunter Water	3.3kV pump starters	Retrofit contactors to 3.3kV pump starters
	Balikera Pump Station – Protection Upgrade	Design supply and install retrofit upgrade to pump motor protection relays
Hydro Aluminium – Kurri Kurri	Potline Rectifier Swing Unit	Design of protection and controls to convert 15kA rectifier to swing unit
	Potline Upgrade Project	Design of 210kA busbars for aluminium smelter potline
Priestley Electrical	Hunter Water - Fern Bay Pump Station	Update electrical drawings in standard Hunter Water format
	Hunter Water – Morisset Pump Station	Electrical Design for Morisset Pump Station including verification of fault levels and cabling
	Swansea Pumpstation	Generator supply - motor starting investigation
Cargill Australia – Oilseed processing	Transformer & 33kV reticulation	Design, procure, supply & commission a 33kV transformer and reticulation system
	33kV Prefabricated Substation	Design, procure, supply and commission a 33kV substation
Wyong Shire Council	Lower Wyong Pumpstation	Design of pump station electrics. Including 500kW soft starters