

CASE STUDY:

External Generator Installation & Power Continuity Upgrade

QUICK FACTS



Large High-Traffic Retail & Commercial Facility



24x7 Operations with Cold-Chain Dependencies



45kVA External Generator Deployment



Enhanced Electrical Resilience & Business Continuity

The Challenge

The existing generator infrastructure covered general electrical requirements, but the IT stack needed a dedicated solution. The objective was to deploy a modern externally rated generator that could integrate with existing switchboards and backup systems without major redesign, and without disrupting day-to-day operations.

The physical installation environment added complexity. The generator had to be delivered into a confined external area with limited access, requiring coordinated delivery planning, specialised transport, and controlled final placement using onsite forklifts.

All existing infrastructure needed to remain operational throughout the works. Commissioning also required out-of-hours testing, including a full black-start validation to confirm automatic transfer and real failover behaviour—while managing noise and minimising impact to site operations.

Client Overview

The client operates a large, high-traffic retail and commercial facility that depends on uninterrupted power to support refrigeration, logistics systems, environmental controls, and 24x7 customer-facing services. The site spans multiple buildings, service areas, and production zones, with continuous movement of staff, suppliers, and customers.

Because outages have immediate operational, financial, and safety implications, the facility requires strong electrical resilience—particularly during early-morning trading and critical cold-chain processes. While backup generation existed onsite, load expectations and redundancy requirements had increased as the site expanded. The organisation sought an upgrade that would strengthen continuity while remaining compliant and operationally practical.

The Solution

Focus Group Technologies delivered a complete supply, installation, and commissioning service for a 45kVA externally rated generator system, designed to integrate seamlessly into the facility's existing electrical environment.

The project was planned to avoid disruption and retain the existing generator assets onsite, with no requirement for redesign of the broader backup environment. We supplied and installed the cable trays, heavy-duty cabling, and electrical components required to connect the new generator to the line side of the site's backup power system, including compliant isolators and external mounting hardware.

Delivery was coordinated using a HYAB truck, with site teams engaged to clear access paths and ensure safe handling. Final positioning was completed using onsite forklifts under our direction. Once installed, the generator was electrically integrated and configured to align with safety and compliance requirements, including switching behaviour and control functions.

The project concluded with a scheduled after-hours black-start test to validate ATS behaviour and confirm full readiness for live outage conditions. Ongoing support was formalised through a maintenance agreement and scheduled verification testing.

Technology Deployed

Focus Group Technologies deployed a dedicated external generator solution to strengthen the client's power-continuity environment:

- 45kVA externally rated generator system
- Integrated acoustic enclosure and fuel system
- Custom cable trays and heavy-duty line-side cabling
- Integration into existing switchboard and generator infrastructure
- Automatic Transfer Switch (ATS) configuration and black-start validation

This deployment strengthened site resilience, improved failover reliability, and ensured dedicated IT load protection without disrupting live operations.

About Focus Group Technologies

This power-continuity upgrade reflects how Focus Group Technologies delivers critical infrastructure projects, combining structured planning, controlled implementation, and long-term operational support.

Guided by our four pillars, Procure, Perform, Protect, and Power, we source the right solutions, deliver them without disruption, strengthen resilience, and ensure dependable performance over time.

As an Australian IT solutions provider specialising in Infrastructure, Procurement, AI-Ready Infrastructure, and Power & Cooling, we help organisations align technology investment with real operational outcomes.

The Outcome

The client now benefits from a modern, reliable power-continuity upgrade that strengthens site resilience without downtime or costly infrastructure redesign. The new generator provides dedicated load support during outages and integrates cleanly with existing systems, improving confidence during high-traffic trading periods and critical cold-chain operations.

The installation was completed without disrupting daily operations through controlled logistics, safe placement in a constrained environment, and after-hours commissioning. The successful black-start validation confirmed reliable failover behaviour under real outage conditions.

With ongoing maintenance and scheduled verification testing in place, the client has improved operational resilience, reduced outage risk, and long-term assurance that the backup power environment will perform when required.



Contact Us

From infrastructure and AI-ready environments to resilient power and cooling solutions, our experts can help you plan and implement the right technology for your business.

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