

## CASE STUDY / POLARIS DATA CENTRE ELECTRICAL CONTRACT /



### FAST FACTS /

- / 7000sqm data centre built to accommodate growth
- / Configured to n + 2
- / High Security 24 hour physical presence system
- / CCTV and Fingerprint scanners
- / Bullet-proof rooms
- / Back up power system



### CLIENT /

Suncorp and Springfield Land Corporation

### BUILDER /

Theiss

### SERVICES REQUIRED /

Electrical and Communications systems for N + 2 Data Centre

### TIMELINE /

18 Months

### LOCATION /

Ipswich, Queensland

### CONTRACT VALUE /

\$30 million

The \$220 million Polaris Data Centre opened in January 2009 providing a data hosting platform to store mission-critical information for many organisations from government departments to multinational corporations. These customers rely on their operating systems and the information in their databases to function. In order to guarantee the security of their data, the Polaris Data Centre is configured to be n + 2. This means, when n is the data currently being stored, the same problem can occur three times before any information is lost.

Polaris was also built with a look to the future with inbuilt upgrading systems relatively simple to initiate. The Polaris Data Centre is built to be modular, flexible, and scalable to take advantage of tomorrow's requirements.

The centre provides sophisticated power and cooling services that must operate at all times – even when local distributors experience power outages. The two sources of power, Energex main grid and UPS, work in conjunction with one another to ensure a complete back-up of the

building's systems and ultimately the clients' information.

Power supply to the building is scalable for growth, with the current supply rated at 800 MW per square metre however having the ability of being upgraded to 1500 MW per square metre with little effort, increasing the centre's capacity to support larger storage systems and associated cooling facilities.

Security for the facility is also of high priority because of the mission critical nature of the data being stored. The building's security system looks like something from a Mission Impossible movie. It includes 24 hour physical presence security, full internal and external CCTV, bullet-proof rooms, swipe access to lifts, fingerprint scanners and weighted man-trap cylinders.

Cable requirements for the electrical outfitting of the Polaris Data Centre were massive. They include 2 kilometres of bus duct, 71 tonnes of fire-rated sub-main cable, 16 tonnes of high-voltage cable, 30 tonnes of TPS and XLPE cable, and numerous kilometres of cable tray and ladder.