



QLD Government:

Innisfail Police Station: Mechanical Services Upgrade

PROJECT PROFILE

Mechanical Services

The roles of Cold Energy Automation during this project were:

- Design & Construction of the Mechanical Services Switchboard.
- Mechanical Electrical services installation, fit off and testing.
- Building Management System Design, Programming and Commissioning.
- System Integration: Energy Metering, VSD's, Water Flow.
- Create & Commission System Graphical Supervisor.
- Air & Water Balancing.

Project Equipment

- Trend Building Management System
- Siemens G120 Variable Speed Drives
- Siemens Water Flow & Control Valves
- Nemo Energy Meters
- Allen Bradley Micro 800 PLC

Control System Communication Protocols

- Trend Propriety
- BACnet MS/TP
- BACnet IP
- Modbus RTU

Project Overview

The existing Police Station was fully upgraded with;

- 3 x AHU's, 3 x FCU's, 2 x EF's, 4 x Pumps, 2 x Chillers, 2 x Heat Reclaim Pumps, 10 x Energy Meters, 13 x Variable Speed Drives, 8 x Ultrasonic Water Meters.

The AHU's, EF's and Pumps were controlled by 2 x Trend IQ3 controllers in the mechanical services switchboard. The energy metering and ultrasonic water meters were integrated via a Trend IQ3/XNC (Modbus RTU). The variable speed drives were interfaced over Bacnet MS/TP, Trend IQ3/ BINC. The complete site was displayed graphically on a touch screen PC in the foyer and site PC in the plant room via the Trend 963 supervisor. All alarming, logging, set points and system status can be displayed and adjusted at these locations.