

Description

- ◆ Newquay Cornwall Airport is the main commercial airport for Cornwall, located northeast of Newquay on Cornwall's north coast. Its runway was previously operated by RAF St Mawgan before the runway was handed over in December 2008.



Part of a major European development funded strategy for dealing with the airport's structural and sustainability issues



Involvement

SDS carried out a full survey of the electrical and mechanical services to establish the condition, functionality and controls including the site infrastructure and capacity

- ◆ Carried out condition surveys of the electrical & mechanical services.
- ◆ Replacement and upgrading of various mechanical and electrical services serving the arrivals, security and departures terminal building.
- ◆ Reviewed energy consumption of the airport.
- ◆ Provides renewable options to the airport.
- ◆ Design of a lightning protection system.
- ◆ Access control systems.
- ◆ Building Management System installation.

Benefits Delivered

- ◆ The existing mechanical plant serving the ventilation systems to the arrivals, security and departures had limited means of control and a number of units had failed. We undertook an invasive survey with a controls specialist and provided a detailed design to upgrade and link the existing BMS systems together. One point of access was provided with a head end controller and the introduction of local controls including CO2 monitoring and time schedules.
- ◆ It was established that the lighting system within the arrivals, security and departure terminals contributed to a significant part of the electrical consumption of the buildings. We prepared models to show the lighting levels and consumption of energy for the existing system. The model also demonstrated how the provision of the proposed lighting schemes would reduce energy consumption, capital and maintenance costs. The savings were achieved through the introduction of lighting controls, the use of LED and low energy compact fluorescent options.