Case History
Dubai International Airport, Dubai

Where:
Dubai International Airport, Dubai

What:
3 x 2250 kVA DQKD generator sets with DMC 200 controllers

Purpose:
To provide emergency standby power for the Royal Air Wing of Dubai International Airport — the terminal used by the Dubai Royal Family

Primary Choice Factors:
Cummins’ use of state-of-the-art technology and the ability to provide a superior solution that would meet the critical emergency backup power needs of the client

World’s largest aircraft can rely on safe landings with Cummins Power Generation

DUBAI, MIDDLE EAST — The Royal Air Wing is being constructed as part of Dubai International Airport’s $2.5 billion expansion and is dedicated to the Dubai Royal Family and their VIP visitors.

The terminal will handle some of the world’s largest aircraft, including the Airbus A380 (the biggest airliner built to date) and the world’s first double-deck passenger aircraft. The building will have gates specifically designed for twin-deck embarking and disembarking. After completion the airport will have the capacity to handle 70 million passengers annually.

As part of the operation, the client needed to engage a power supplier that could guarantee that in the event of a power failure, electricity would be restored to the site within 10 seconds. Cummins Middle East, the regional distribution center for the Middle East and located in Dubai, was awarded the prestigious contract by Balfour Kilpatrick, a large multinational construction contractor involved in the build process.
Cummins Power Generation was initially chosen after having demonstrated the ability to meet all performance requirements, including low noise levels during operation and integrating with the client’s building management system.

In fact, Cummins Middle East’s scope in this project ultimately included the design (installation drawings, electrical schematics including interface drawings to customer medium voltage switchgear), supply, supervision of installation, testing and on-site training for the project. The installation included three units of 2250 kVA for standby applications, DMC 200 (digital master controls) and, additionally, a neutral grounding board and resistor.

The generators were tested at the site using reactive load banks supplied by Cummins Middle East which included parallel operation and functional tests to verify the response time of the generator sets’ digital controls.

The Cummins Middle East’s engineering team successfully completed the commissioning and testing of all the generator sets and controls in late 2005 and has now handed the units over to the client.

We are pleased to have been involved in such a prestigious installation that the Dubai Royal Family and their guests will benefit from and hope that the success of the project will lead to further work at the airport.

For more information about integrated emergency power systems, contact your local Cummins Power Generation distributor or visit www.cumminspower.com.