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Standby Power

Case History

Hospital De S. Joao

Where:

Porto, Portugal

What:

Two generator sets - model C2900 D5 powered by QST23 G3 engines.

Purpose:

To provide emergency backup power for the hospital's critical load requirements in the event of a utility outage.

Cummins provides round the clock power protection to Hospital De S. Joao

Hospital De S. Joao is the largest hospital in Northern Portugal and second largest in the country. Located on the edge of the city of Porto, the medical facility serves the population of the capital city and neighbouring counties, which totals around three million people.

Since it was founded over fifty years ago the hospital has grown significantly to help meet the growing demand for its wide range of speciality services, including cardiology, gynecology and obstetrics, neurosurgery and oncology, among others.

To meet the increasing electrical needs of the 1,124 bed facility, hospital officials selected a Cummins Power Generation system including new generators to provide emergency power to the entire establishment in the event of a power outage,



Installation of C900 D5 generator set



Cummins power solution is housed in a specially designed underground room located in the hospital grounds at a distance from the main buildings to minimise noise and vibration in the hospital.

Cummins distributor in Portugal, Electro Central Vulcanizadora (ECV) successfully fought off competition from other companies, including Caterpillar, to win the business. The final decision was based in part upon Cummins ability to deliver a turn-key project and outstanding after-sales service and support. Another key factor was the high reliability of Cummins solutions already proven at other facilities of this customer during their previous ten-year relationship history.

ECV worked closely with the main contractor, Teixeira Duarte Engenharia e Construcoes, S.A., to install the system. It consists of two C900 D5 generator sets powered by QST23 G3 engines, which are installed in a purpose-built underground room in the garden area located outside the main facility to optimise patient comfort and power distribution to the hospital.

As the construction project progresses it is expected that a further two Cummins generator sets – C900 D5 and C350 D5 will be added. The hospital's maintenance department will manage the system, which will operate around 50 hours per year and during grid power outages. It will be tested without load every week and is capable of operating 24 hours a day.

As soon as a power blackout occurs, the standby system kicks in automatically with the generator being synchronised to produce full load power for all the buildings within the 15-second hospital specification requirement.

Cummins' standby power solution will ensure that essential care is unaffected by any interruptions to mains power. As soon as a power blackout occurs, the standby system kicks in automatically with the generator being synchronised to produce full load power for all the buildings within the 15-second hospital specification requirement.

The Hospital De S. Joao project reinforces Cummins' proven track record in power generation, particularly its ability to deliver a total system solution and provide peace of mind, especially when the health and lives of a growing number of patients are at stake every day.

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



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