Case History
Asiacell Al-Masbah Data Centre

Where:
Baghdad, Iraq

What:
Four C550 D6e enclosed generator sets with QSX15 engines in parallel configuration, with LV switchgear, DMC1000 control, ATS GTEC 1600 Amps with bypass, fuel system, power and control cables, and a SCADA (Supervisory Control And Data Acquisition) system.

Purpose:
Prime power for data centre

1.6 MW power solution for telecom company’s Baghdad data centre

Asiacell Telecom Company has risen to become one of the leading companies of Iraq’s growing telecommunications sector. When it was established in the northern city of Suleimaniah in 1999, economic and social conditions were extremely harsh. Asiacell overcame these obstacles to begin operations in 2000, the first mobile telecommunications company anywhere in Iraq. Its coverage expanded in 2003 when it was granted a two-year licence for the six northern provinces.

A licence extension in 2005 meant it could become the first mobile telecommunications company to offer services to the entire country. Today it has offices in cities throughout Iraq including Baghdad and Basra and employs close to 3000 staff.
Asiacell serves more than 8 million mobile phone and mobile internet subscribers, offering them a wide range of voice and data services.

A key phase of Asiacell’s impressive and ambitious expansion was carried out with the help of Cummins Power Generation’s distributor, the Modern Iraq Company for Trading Agencies (MICTA). In August 2007, Asiacell had bid successfully for a 15-year national GSM license and needed to expand its mobile phone network. This required generator sets to be located not only at urban sites but also in more remote regions with challenging climatic conditions.

MICTA delivered enclosed generator sets at the rate of 750 a year, proving its ability to work within challenging environments and to noise and vibration level constraints. The Cummins Power Generation equipment MICTA installed proved its performance and reliability beyond doubt. When Asiacell also needed a prime power solution for its new data centre at Al-Masbah in Baghdad, MICTA and Cummins Power Generation were again the natural choice.

MICTA stepped into action to design and install a 1.6 MW power station using Cummins Power Generation equipment. MICTA performed the roles of consultant, mechanical contractor and electrical contractor. Four Cummins Power Generation C550 D5e enclosed generator sets with QSX15 engines were installed in a MICTA-designed room. Special attention was paid to air quality and noise levels.

The system operates automatically, in a parallel configuration, supported by LV switchgear, DMC1000 control, ATS GTEC 1600 Amps with bypass, a fuel system, power and control cables, and a SCADA (Supervisory Control And Data Acquisition) system. The total power requirement of the data centre including mains power is 2MW.

Asiacell today sees itself as a vanguard for the social and industrial prosperity of its country, helping to bring Iraq into the 21st century. A strong relationship with Cummins Power Generation is helping Asiacell work towards that goal.

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