



# Standby power

## > Case History

Asker and Baerum Hospital, Norway



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### **Where:**

Asker and Baerum Hospital, Oslo, Norway

### **What:**

An 891 kVA emergency standby power system from Cummins Power Generation with PowerCommand® controls

### **Purpose:**

To provide nearly total power requirements for a new wing on the 53,882-square-meter hospital in the event of a utility failure

### **Primary choice factors:**

Cummins Power Generation was selected on the basis of past experience, reputation and the ability of the PowerCommand generator set to accept the full load of the hospital wing in one step

## **Norwegian hospital finds cure for standby power with generator from Cummins Power Generation Inc.**

OSLO, NORWAY — The Asker and Baerum Hospital on the outskirts of Oslo, Norway, began as a small municipal facility in 1924. Over the years, it has gone through multiple expansions and is now a large county hospital with over 53,882 square meters (580,000 square feet) of physical treatment area. During each expansion, the hospital has added standby generators to serve as backup for critical systems in the event of a utility outage. Due to various physical limitations, each addition to the hospital has had its own standby system installed over the years, resulting in multiple units of varying sizes from various manufacturers, all working independently. A generator set installed five years ago utilized a Cummins engine, and the generator set for the most recent expansion was provided by Cummins Power Generation with the assistance of its local distributor, Satema.

For its latest expansion project, the hospital wanted the generator set to provide for nearly all of the electrical load in the new addition. The hospital chose a model 713DFHB, 50 Hz standby generator set with PowerCommand controls and AmpSentry™ fault protection. The generator set is rated at 891 kVA



A new 819 kVA (713 kW) standby generator from Cummins Power Generation supplies the hospital's newest addition.

(713 kW) and is intended to supply a larger percentage of the new wing's loads compared with power systems that had been installed for other additions to the hospital. On-site fuel storage provided the hospital from 60 to 70 hours of running time if the utility has an extended outage.

#### More dependent on stable electric power

"Our modern methods of medical treatment cause us to be much more dependent upon electrical and technical equipment which demand a stable source of energy," says Bjarne Olaussen, general technology director for Asker and Baerum Hospital. "With this new wing, we chose an emergency backup power system that provided coverage for nearly all our electrical loads."

*"A major advantage of the new Cummins Power Generation generator set with PowerCommand control is its ability to accept the total standby rated load in one step."*

Olaussen said that in the past, only the critical areas of the hospital wing were provided with standby power — the operating rooms, anesthetics equipment, patient monitors, basic lighting. Nowadays, he said, most tests are handled by computers, and even doctors' reports are being handled electronically. In short, this and other modern hospitals are almost totally dependent on a constant source of electric power.

Over the years, the hospital has installed four independent standby generator sets from three different manufacturers. During a previous expansion, they installed their first standby generator set that was



The PowerCommand digital master control assures a smooth transition from utility to generator power.

powered by a Cummins engine and were pleased with its performance. "We chose the Cummins Power Generation system this time based on our previous good experiences with a similar system we installed earlier," said Olaussen.

#### The digital advantage

"A major advantage of the new generator set with PowerCommand control is its ability to accept the total standby rated load in one step," said Kristian Blikberg, account manager with Satema, the Norwegian distributor for Cummins Power Generation.

"Another digital advantage," continued Blikberg, "is the new generator set's ability to synchronize and parallel with the utility." During test runs the hospital personnel do each month, the generator is started and automatically synchronized and paralleled with the utility. Then, using the PowerCommand control, the generator slowly takes over the hospital load and phases out the utility power. This allows monthly testing of the generator set under full load with no risk to any patient-related activities.

Olaussen said that their experience with Cummins Power Generation generators has been excellent. "We have now run a generator set with a Cummins engine for five years with very good experiences. We have not had any problems whatsoever with it over the course of those years, and, therefore, the choice for this new system was rather simple."

For more information about integrated standby power systems, contact your local Cummins Power Generation distributor or visit [www.cumminspower.com](http://www.cumminspower.com).

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