



Standby power

> Case History

Jollibee Commissary, Canlubang Laguna,
The Philippines

Our energy working for you.™



**Power
Generation**

Where:

Jollibee Commissary, Canlubang Laguna,
The Philippines

What:

Two 1750DQKB generator sets, powered by QSK60 engines, one 2 MW DQKC generator set, powered by a QSK60 engine and PowerCommand® Digital Master Control MC200 from Cummins Power Generation

Purpose:

To provide backup for the grid power supply to the food-processing plant in the event of power outages, especially during the rainy season and also during maintenance operations

Primary choice factors:

Product quality and reliability, air quality in compliance with emission standards, with good after-sale service

Philippines' largest fast-food chain picks Cummins Power Generation for standby at its food processing plants

CANLUBANG LAGUNA, THE PHILIPPINES — Jollibee Foods Corporation started operations in 1978 with one outlet located in Quezon City. Today, the company has become the largest fast-food chain in the Philippines, with 440 outlets within the country and 30 stores overseas, employing about 40,000 people.

Serving the requirements of the fast-food outlets are three commissaries (food processing plants). These are located in Pasig City, Cebu City and, the latest, in Canlubang Laguna.

The 60,000 square meter plant in Canlubang Laguna currently operates 10 hours a day and employs about 200 staff. With expansion of the fast-food outlets proceeding at around 50 a year, the output of the commissary will also increase. When fully operational, in about one to two years' time, it will have about 500 people working 16 to 24 hours a day, serving about 750 outlets.

Power to the Jollibee Commissary at Canlubang Laguna is supplied by the Manila Electric Company, the local utility, through mostly overhead cables. Outages occur during the rainy season when there are typhoons, and sometimes due to disruptions from maintenance works.



Cummins Power Generation gensets comply with high emission standards set in accordance with Philippines Clean Air Act 2002.

Since the Commissary is a key component in Jollibee's value chain, downtime has to be kept to an absolute minimum. To ensure minimal disruption from the grid power supply, two Cummins Power Generation 1750DQKB gensets, powered by QSK60 engines, and one Cummins Power Generation 2 MW DQKC genset, powered by a QSK60 engine, are currently being commissioned. Two other Cummins Power Generation 603DFGB gensets, powered by VTA28 engines, at another Commissary are being dismantled and moved to the new plant, bringing the total number of gensets to five to provide backup power supply of 7 MW. The new commissary's total requirement is approximately 7 to 10 MW.

"We are very happy with the installation done by Cummins Power Generation. The quality of workmanship is very good and the response to service calls is fast," said Mr. Romy Fernandez, Plant Engineering Manager, Jollibee Foods Corporation.

The installations are being carried out by Cummins Philippines, which was incorporated in January 2001 to better service the requirements of new and potential clients in the country.

"We are very happy with the installation done by Cummins Power Generation. The quality of workmanship is very good and the response to service calls is fast," said Mr. Romy Fernandez, Plant Engineering Manager, Jollibee Foods Corporation.

PowerCommand Model 200 Digital Master Control

The top-of-the-line MC 200 master controller will synchronize the operation of the five gensets. The PowerCommand Digital Master Control MC 200 is a microprocessor-based paralleling system component, designed to directly interface with Cummins PowerCommand Paralleling



The PowerCommand Digital Master Control MC 200 synchronizes the operation of the gensets.

gensets. The Digital Master Control is designed for use in low or medium voltage isolated bus (not utility paralleled) applications.

The control system provides flexibility to meet specific application requirements, ease of operation, advanced functionality and optimum system reliability and serviceability. The Master Control may be either separately installed at a convenient location or integrated into the system power sections when required.

The PowerCommand control is designed for mounting on the genset. Control power for PowerCommand and the Digital Master Control is usually derived from the genset starting batteries, and is backed up by an independent battery backup system.

Major control features include full function master control for isolated bus paralleling systems. The system master control has provisions for use of the on-site power system for emergency and standby (isolated bus) operation.

The automatic load adding and shedding system includes smart load sequencing to automatically add and remove loads in a prioritized manner, as the system capacity changes due to genset availability and also due to changes in system load level. The automatic load sharing feature distributes the load among the five gensets.

The system control will have an interface with the Building Management System.

Another feature of the installation at the Jollibee Commissary is the total compliance of the gensets to the high standards for air quality set by the Department of Environment & Natural Resources (DENR), under the Philippines Government, in accordance with the country's Clean Air Act 2002.

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

Our energy working for you.™

www.cumminspower.com

© 2008 Cummins Power Generation Inc. All rights reserved. Cummins Power Generation and Cummins are registered trademarks of Cummins Inc. PowerCommand is a registered trademark of Cummins Power Generation Inc. "Our energy working for you." is a trademark of Cummins Power Generation. F-1972 Rev. 4/08 (2005)

