



Standby power

> Case History

My Dinh National Stadium in Hanoi, Vietnam



**Power
Generation**

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Where:

My Dinh National Stadium in Hanoi, Vietnam

What:

Two 833DFHC generators powered by QST30G3 engines, generating 2082 kVA, from Cummins Power Generation

Purpose:

To provide emergency power, particularly during events at the stadium, such as the SEA Games 2003

Primary choice factors:

Product reliability; the high reputation of the distributor, Diethelm Vietnam; and low noise levels of products (85 dBA at seven meters)

Standby power at My Dinh National Stadium in Hanoi during SEA Games 2003

HANOI, VIETNAM — The 22nd South East Asian Games (SEA Games), held in Vietnam from December 5 to 13 2003, were a significant triumph for the host nation. Not only did Vietnam emerge as the runaway leader among the 11 participating countries, with a haul of 346 medals from the 442 events representing 32 sporting activities, the nation also demonstrated tremendous organization skills which included the provision of high quality venues. Following the SEA Games, Vietnam successfully hosted the second ASEAN Para Games, the South East Asian Games version of the Paralympics, in Hanoi, from December 21 to 27, 2003.

My Dinh National Stadium

The 40,000-seat My Dinh National Stadium in Hanoi was one of a series of construction projects undertaken throughout Vietnam, for the region's biggest sporting event. Next to the stadium, there are two football training grounds and a gymnastics training area. A 15,000-seat aquatic sports facility, with nearly 100 rooms for administration, equipment storage, training and medical care, was also built.

The My Dinh National Stadium symbolizes the cooperation between Vietnam and China. While Shanghai Design Institution was the principal consultant for the project, the



Cummins Power Generation gensets provide emergency backup to My Dinh National Stadium.



Cummins Power Generation Advanced PowerCommand Control enhances system reliability and maximizes facility operation.

main contractor as well as the mechanical and electrical contractor, was Hanoi International Stadium Group (HISG) of China whose portfolio of accomplishments includes the 80,000-seat Shanghai Stadium.

Two 833DFHC generators powered by QST30G3 engines and generating 2082 kVA, from Cummins Power Generation, provide emergency backup, particularly during events at the stadium, such as the SEA Games 2003.

The Cummins distributor, Diethelm Vietnam, worked closely with main contractor HISG right from the design stage, providing consultancy services in areas such as generator room design, fuel systems and soundproofing.

Consequently, Mr. Wu Zen, Vice Project Manager, HISG was highly appreciative of the capabilities of the engineers from Diethelm Vietnam and for their support in the execution of the genset supply and installation contract.

“We were right in choosing Cummins, not only since they are a leading manufacturer worldwide, but also because of the qualifications of the Diethelm Vietnam engineers and their hard work,” Mr. Wu said.

By June 2003, that is six months before the SEA Games 2003, HISG and Diethelm Vietnam had already carried out the first commissioning.

“We were right in choosing Cummins Power Generation, not only since they are a leading manufacturer worldwide, but also because of the qualifications of the Diethelm Vietnam engineers and their hard work,” Mr. Wu said.

PowerCommand for Control

Only Cummins Power Generation gensets are available with the industry-leading, microprocessor-based PowerCommand® Control. At the My Dinh National

Stadium, the PowerCommand Control is connected to the network and also to the Marshalling Control Room remote control system supplied by Moeller GmbH of Germany and ATS automatic load transfer panel from SOCOMEC of France.

This field-proven PowerCommand control system offers several attractive features, including integrated digital governing and voltage regulation; analog and digital metering; digital engine monitoring systems; smart-starting systems that regulate the fuel system based on engine temperature to improve stability, starting time and limit smoke; battery monitoring systems that test the genset batteries; AmpSentry true alternator protection; and more.

Smart Power

Microprocessor controls built into the PowerCommand system allow the genset and transfer switch to access critical performance data and communicate that data to each other, as well as to other facility management systems. The control capabilities include diagnostics, testing, feedback functions and corrective actions for enhancing system reliability and maximizing facility operations. The controls run continuously, which means PowerCommand can detect failures even when not in use.

All PowerCommand Automatic Transfer Switches incorporate unique features. They facilitate continuous operation and switching of electrical loads between the primary source and the standby generators. When a loss of utility power is detected, a start signal is sent to the generator and the load is automatically transferred. When utility power is restored, it is automatically transferred back to the primary load. Power transfers are safe, smart and seamless.

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

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