



# **PACIFIC**

## **POWER GROUP**

### POWER GENERATION

Customer Solutions

#### **CUSTOMER:**

Coeur Mining: Kensington Mine

#### **POWER SYSTEM:**

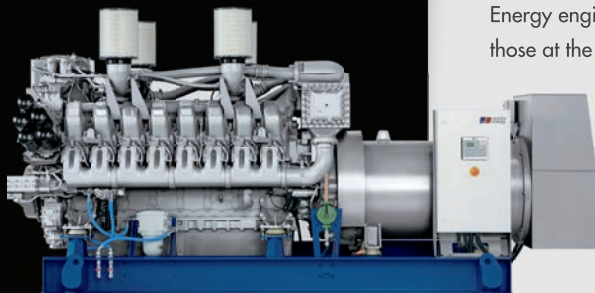
Six MTU 16V4000 MTU  
Onsite Energy Generators

#### **LOCATION:**

Kensington, AK

#### **DATE:**

Spring 2010



MTU Series 4000 Generator

## Prime Power for Remote Alaskan Gold Mine

*At Coeur Mining's remote, off-grid Kensington Mine site about 45 miles north of Juneau, Alaska, access is limited to helicopter, float plane and boat. An established electrical grid is not available and a reliable power generation system is key for supporting the extensive job site infrastructure and accommodations for workers.*

***To meet the prime power needs of the site, Coeur Mining turned to Pacific Power Group for a solution that would provide reliable power and meet Alaska's stringent emissions requirements.***

Our power generation team supplied six MTU Onsite Energy generator sets designed to supply 6100 kW of power and adequate reserves. The generators are the utility for the entire mine's operations, which primarily take place underground and require significant electrical power. A key factor in the genset selection was the reliability of the MTU engines, which are trusted around the world. Time before overhaul for MTU Onsite Energy engines typically exceeds expectations: those at the mine have a projected TBO of approximately 30,000 hours, based on the factory recommended service plan.

***Due to site emission's regulations and the isolated location of the mine, a unique engineering challenge had to be solved, as Alaska required 90 percent reduction of NOx emissions.***

That is achievable with a selective catalytic reduction (SCR) system, but the SCR operation requires liquid urea and the cost of regular shipments to the mine's remote location would be exorbitantly high. Plus the solution would have to be freeze protected due to the inclement Alaskan weather.

To solve this problem, ***Pacific Power Group's team designed a specialized mixing station in which powdered urea is mixed with de-ionized water to produce the needed liquid urea*** – eliminating the high shipping costs. The system included a reverse osmosis water filtration system supplying de-ionized water and a heater to facilitate complete urea mixing. The process is completed using an automated system that pumps the fluid into a heated storage tank. With the custom-built emissions solution from Pacific, Kensington Mine reached the targeted 90 percent NOx reduction.

**Pacific Power Group continues to provide service onsite for the Alaskan mine, including preventative maintenance, predictive maintenance and repair work, along with all necessary engine overhauls.** ⚡