

Combined Heat & Power Solutions

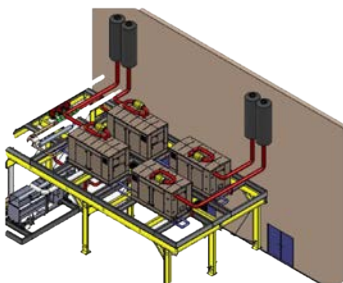
John Muir Medical Center



Hospital reduces energy costs, carbon footprint with combined heat and power.

Modules provide low-emission, high-efficiency heating and power solutions to this 259-bed acute care facility.

With construction underway on a major expansion project, John Muir Medical Center in Concord, California was seeking to incorporate green building technologies as a way to save on energy costs while becoming more environmentally responsible. Their solution was an innovative combined heat and power (CHP, also known as cogeneration) system



By simultaneously producing electricity from in-house generators and harnessing the waste heat from that process hot water, John Muir significantly reduced its need to



purchase electricity and natural gas. The result: a significant reduction in the hospital's ongoing energy costs and overall carbon footprint.

- Date: Summer 2010
- Location: Concord CA
- System:
 - 3 - 250 kW Modules
 - 1 - 150 kW Module
- Engines:
 - 3 - Caterpillar G3412
 - 1 - Caterpillar G3406

For this project, the four modules installed provide up to 900 kW of electricity to the facility. The system runs in parallel to existing utilities, providing a constant source of power during powered by blackouts or scheduled maintenance to the CHP system.

Heat from the engine exhaust is captured with jacket water to provide hot water to the hospital, and an absorption chiller also provides seasonal cooling to the facility.

