

## Case Study

## EMERYSTATION, EMERYVILLE, CALIFORNIA

### Electrical and Thermal Savings

### *Alternative Energy From Ultra-Clean Microturbines*

#### Challenge

The executive partners of Wareham Development, a forward-looking real estate firm based on the San Francisco Bay Area, were seeking to offer their tenants the unique benefit of low cost energy in an environment where utility prices fluctuate regularly.

Distributed generation was chosen as a realistic path to produce the desired end result. Microturbines are often cleaner than fossil fuel-generated power from the local utility, and the ability to produce and use power on the site limits cost exposure to future rate increases. The power generated also relieves the grid during peak periods, and the thermal energy generated from combustion can be used for space or process heating.

One third of Wareham's tenants are in the biotechnology sector and require round the clock power and heat. After considering solar and other alternative power sources, Wareham's principal decided on microturbines for baseload power and co-generated hot water for the EmeryStation facilities.

#### Solution

Two 250 kW microturbines provide round-the-clock power and heat to EmeryStation 1 and one 250 kW microturbine provides the same to EmeryStation North. The 750 kW installed capacity provides approximately one third of the electricity and more than half of the heat used by both buildings. All three units are natural gas fired.

#### Benefits

Wareham Development benefits from secure power, energy savings and reduced energy cost volatility. Wareham's tenants benefit from ultra-clean onsite, reliable power and an installation that is unobtrusive.

#### Results

Annual Emissions: California ARB 2007 Certified

Annual Energy Savings: \$50,000 to \$60,000/year in energy savings net of capital recovery



Located in the growing biotech community of Emeryville, California, EmeryStation 1 and EmeryStation North comprise 440,000 square feet of office, laboratory and retail space. These award-winning facilities offer their tenants the highest quality amenities, such as wireless infrastructure and operable windows. Wareham Development, property manager and developer of EmeryStation, is committed to the environmental and economic vitality of the community.

*EmeryStation 1 and EmeryStation North*

For more information, contact your local Ingersoll Rand office or email [power@irco.com](mailto:power@irco.com)

©2009 Ingersoll Rand Company

Certain Ingersoll-Rand Energy Systems products were developed with the assistance of the Gas Technology Institute (formerly Gas Research Institute), Southern California Gas Company and New York Gas Group. This document comprises a general overview of the products or services described herein. It is solely for informational purposes, does not represent a warranty of the information contained herein and is not to be construed as an offer to sell or a solicitation to buy. Ingersoll Rand Energy Systems reserves the right to modify its products and related product information at any time without prior notice.

