

- Three double-effect absorption chillers and two gas-fired desiccant systems
- 105 total refrigeration tons; 1,500 total cfm
- 44,572 sq. ft. meeting and conference facility
- Downey, California



Commercial and industrial customers in southern California can learn about American Yazaki's, McQuay's and Fresh Air Solutions' natural gas equipment, plus other gas cooling technology, in a unique building. They also get to see the equipment up close in operation.

The Energy Resource Center (ERC) is Southern California Gas Company's (SoCal) most important marketing tool for its many commercial and industrial customers. Located in Downey, the ERC features a conference facility with seating for up to 700, plus various theme rooms used for meetings where customers can learn about gas technologies. The center provides a unique convention and education center for SoCal customers, complete with a variety of operational gas equipment, according to Will Clark, ERC market consultant.

The site of the ERC is unique. Its construction required the demolition of one-third of a facility, built in 1957.

The building includes recycled parts and pieces that were carefully dismantled from a former gas company office complex. The ERC's construction included the installation of a combination of new natural gas-powered cooling systems.

"The heart of our cooling system is three 30-ton chiller/heaters that cool nearly two-thirds of the building and also provide hot water for space heating," says Clark. The absorption units, two American Yazakis and one McQuay, are housed in a central plant. "Having three units gives us the flexibility to closely match the cooling and heating needs of the building," Clark says.

In addition to the absorption units,





Southern California Gas Co.
555 W. Fifth St.
Los Angeles, CA 90013

Yazaki Energy Systems Inc.
13740 Omega Road
Dallas, TX 75244

McQuay International
13600 Industrial Park Blvd.
Minneapolis, MN 55441

Fresh Air Solutions
330 So. Warminster Road
Hatboro, PA 19043-3430

two 1,500 cfm FAS desiccant units improve energy savings by reducing conventional cooling requirements by 40 percent. By reducing the amount of moisture in the area, the DESI/AIR™ systems improve ventilation and energy efficiency.

According to Clark, the combination of the different natural gas-powered pieces has proven to work well for the ERC. “All the units complement each other very well,” he says. The balance of natural gas systems also fits the ERC’s goals of combining energy efficiency, economic advantages and environmental sensitivity.

“Because of our strong commitment to the environment, the use of CFCs was eliminated in the renovation, so the gas

units were an ideal solution,” says Clark. “We also did a DOE-2 simulation study of all the different options being considered for the building, and if you look at the whole building, we exceed the California Energy Commission’s Title-24 regulations for building energy use — the toughest in the nation — by 45 percent. The overall building is very efficient. The level of satisfaction from ease of operation, cost, maintenance all favor gas-powered systems.”

Customers who visit the ERC agree. “Once they learn about it in the classroom,” Clark says, “They can go right into the next room and see the equipment in operation.”



**AMERICAN
 GAS
 COOLING
 CENTER**

400 N. Capitol Street, NW, Washington, DC 20001
 (202) 824-7141
www.agcc.org

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