

CASE STUDY

McQuay Helps GTE Save \$1,000,000 In Energy Costs Per Year!

The more than one million square foot building utilizes a unique combination of HVAC equipment for the ultimate in flexibility and energy savings.

GTE's Telephone Operations headquarters in Irving, Texas demonstrates energy management at its finest. The more than one million square foot building utilizes a unique combination of HVAC equipment for the ultimate in flexibility and energy savings.

The HVAC system consists of McQuay chillers including two 1150-ton chillers, one 800-ton low temp and one 600-ton dual compressor chillers. The system also includes an ice storage system, a stand-by gas generator, and a 1,000 ton McQuay direct-fired double-effect absorption chiller. With this combination of equipment, GTE can take advantage of every energy-savings opportunity. And best of all, the system is designed to put GTE in the best position possible for energy deregulation.

Here's how the system works: The absorption chiller is used for base-load cooling—running 24-hours a day to provide cooling. The ice storage system provides chilled water during peak cooling times. At



GTE's Telephone Operations headquarters in Irving, Texas.

night, during the electric off-peak time, the chillers turn on to create the ice that will be needed by the system the next day.

In six years of operation, running the absorption chiller with the electric centrifugal chillers to make ice at night—and instituting a variety of other energy-saving measures including energy efficient lighting—the company has saved at least \$1,000,000 per year. In addition, GTE runs the electric chillers during the winter time

when spot market gas costs rise above a preset economic point. This strategy has earned GTE a 34% reduction in demand charges and is responsible for saving \$350,000 per year.

GTE made McQuay its brand of choice for the chillers and absorption equipment because of the company's previous satisfaction with McQuay and McQuayService.