

TECOCHILL®

- Gas engine-driven chiller
- 125 total refrigeration tons
- 68,000 sq. ft. nursing facility
- Broomall, Pennsylvania



A tight budget led this nonprofit organization to turn to efficient gas cooling.

For Philadelphia Presbytery Homes and Services for the Aging (PPHSA)'s Broomall Presbyterian Home, high summer electric demands, related to an inefficient 30-year-old electric air conditioner, made it critical to look for energy alternatives when the old system began to fail.

Talk about perfect timing! PECO Energy was just putting together its first incentive program to encourage use of natural gas for cooling as well as heating.

Tom Pappanastasiou, PPHSA's director of property management, jumped at the opportunity to save big bucks for the nonprofit. After extensive research and the promise of a healthy incentive package from PECO Energy,

he decided on a retrofit with a gas engine-driven chiller, the TECOCHILL® CH-125.

"We projected that the cost difference between installing an electric chiller and a gas chiller was \$40,000, and the electric was less," Pappanastasiou says. "Without the contribution from the utility company, the installation would not have occurred."

PECO knew that the nursing facility was concerned with stewardship of residents' resources. The Broomall Home cares for 147 residents, mostly elderly, with a number relying on financial assistance. As a result, PECO provided a grant that covered 25% of the installation costs. The equipment is expected to pay for itself within 3.5 years.





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“This place doesn’t ask people to leave when the money runs out,” says Mark King, account manager for PECO. “Their charity budget is high. And with the high cost of health care, we felt we were helping them carry out their mission. We are committed to new gas technologies to help our customers remain competitive.”

According to Tom Moody, the installation’s engineer, the retrofit was a piece of cake. He simply ripped out the old electric chiller, ran a new gas line underground, and connected the new chiller to existing piping.

The equipment has proven to be even more efficient than expected. Because the gas chiller recovers thermal energy

from its exhaust, it also provides hot water for the kitchen, bathrooms and administrative offices in the summer. The facility uses boilers to heat water the rest of the year.

Pappanastasiou expected a net annual savings from the gas chiller of \$12,000 and “we’re pretty much on base,” he says. The equipment has been running since June 1996.

PECO’s King is hoping that PPHSA will also convert some of its 20 other sites to gas cooling. Judging from the performance of Broomall’s TECOCHILL[®], this would be a smart investment.

“We’re satisfied with the choice we made,” Pappanastasiou states.

