# TECOCHILL®

## CH-200x – STx Series CHILLER

### SITE: HAMPSHIRE HOUSE - WEST HARTFORD, CT

Case Study


### TECOCHILL Reduces Electric Load On Connecticut Grid

Hampshire House, a condominium complex located in West Hartford, Conn. is the first facility to replace its existing electric chiller with a natural gas engine-driven chiller under the new Electric & Gas Efficiency Program offered by Connecticut Light & Power to help reduce demand on the state's congested electric grid.

#### TECOCHILL: A Solution for Connecticut's Energy Independence

As a result of Connecticut's growing demand for electric power and its restrictive distribution system, the state is required by the federal government to institute Federally Mandated Congestion Charges (FMCC). These FMCCs are driving up consumer electric rates. To better control future electric costs, the Connecticut DPUC enacted an efficiency program with the state's largest electric utility to offer incentives for natural gas chillers to reduce load by replacing electric chillers.

Bob Panora, president of Tecogen said " Under Connecticut's progressive legislation, known as the Energy Independence Act, our equipment will help minimize load, during the air conditioning season, when electricity rates are the highest and the grid is at risk of overload." An important feature of the program is to analyze the peak load reductions and source-BTU (fuel) comparison that are achieved with natural gas engine-driven chillers. "Reducing the electric peak and fuel source costs will reduce electric rates and benefit the environment at the same time," said Panora. Tecogen can help manage the costs of soaring energy prices with newer, more efficient natural gas powered equipment. TECOCHILL gas engine-driven chillers can save 30-40% of air conditioning operating costs compared to electric chillers while reducing electric demand.

#### Replacing electric chillers in older buildings can be a challenge. TECOCHILL gas driven chillers can be rigged through some very tight spaces.

Hampshire House is a six stories, 200 unit condominium complex constructed in 1962. Like many buildings throughout Connecticut, it was built with a central chiller in the basement. When it came time for replacement, that location could have presented an impossible challenge but a key feature of the TECOCHILL gas engine-driven chillers is its ability to be shipped in pieces and assembled on site.

The units are completely assembled and performance tested in the factory in Waltham, MA. They can then be disassembled and shipped to the site for on-site reassembly. This allows these chillers to be rigged into some very tight areas.

See photos of this challenging installation on the back of this case study. Please visit www.tecogen.com or contact us directly for more information on this project and ways we can help you conserve energy at your location.

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# TECOCHILL STx SERIES CHILLER CASE STUDY: HAMPSHIRE HOUSE

The evaporator and condenser assembly are rigged through the ventilation louver that was originally used for combustion air for the boilers.

The refrigerant oil separator is rigged into the basement mechanical room to be assembled onto the chiller.

Once inside, the engine/compressor is reassembled above the condenser and evaporator.

To lift the finished chiller onto the existing pad, a fork lift was rigged into the basement using the old ventilation louver for access.

The placement of the Tecochill Natural Gas Engine Driven Chiller is now complete and all that is needed is to install the sound attenuating engine enclosure and make the final connections.

**FOR MORE INFORMATION:**


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