

El Paso Corporation

CASE STUDY

GOALS:

- ✓ Safety
- ✓ Reduce Energy
- ✓ Environmentally Friendly Refrigerant
- ✓ Return on Investment

PROJECT TEAM

MEP ENGINEERS

Redding, Linden, Burr

MECHANICAL

Gowan, Inc.

ELECTRICAL

Britain Electric, Co.

RIGGING

TNT Crane & Rigging, Inc.

SITUATION

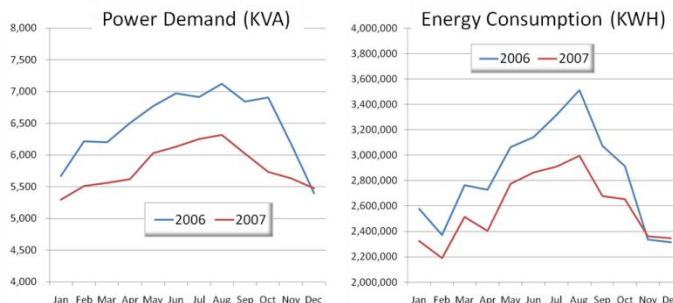
The 5,000 ton chiller plant at the El Paso corporate headquarters building in downtown Houston was placed in service in 1963. The original units were steam turbine driven and later retrofitted to electrical motors in the late 80s to reduce operating cost. The original units had past their useful lives, inefficient and utilized ozone depleting refrigerants.

LIFE CYCLE STUDY

An engineering economic analysis was performed to compare various manufacturers' equipment considering first cost, energy performance, life cycle cost of operations and maintenance and the total cost to implement the project. It was quickly determined that TNT Crane and Rigging, Inc. with one of the largest wheel based cranes would be the most economical means to reach the 31st floor.

RESULTS

The project was completed with no safety incidents and the new equipment was placed on line in November of 2006. The building power demand was reduced by 800 kva and saved approximately 3,150,000 kwh in electric consumption. The project payback was accomplished in under four years.



“Project success is accomplished with excellent planning and assembling the right Team...”

Greg Schindler, PE, CFM