



COMMERCIAL

“Because of this retrofit we reduced our overall energy consumption by 20% without impacting our tenant comfort.”

– **Roger Vasquez**
Director of Engineering,
Transwestern/Pennzoil Place

PROJECT AT A GLANCE:

- **Project Gross Footage:**

1,814,930

- **Project Cost:**

\$8,119,792.00

- **Payback:**

12.6 years

Repositioning an aging commercial office property asset as a profit powerhouse.

◆ CHALLENGE

When it was built in 1975, Pennzoil Place was an award-winning architectural icon boasting the very latest in building-systems technology. But by 2010, the venerable property was burdened by obsolete building automation and HVAC systems that couldn't keep up with the escalating demands of the 21st century. Inevitably, this diminished its competitiveness and its tenant revenue stream.

◆ SOLUTION

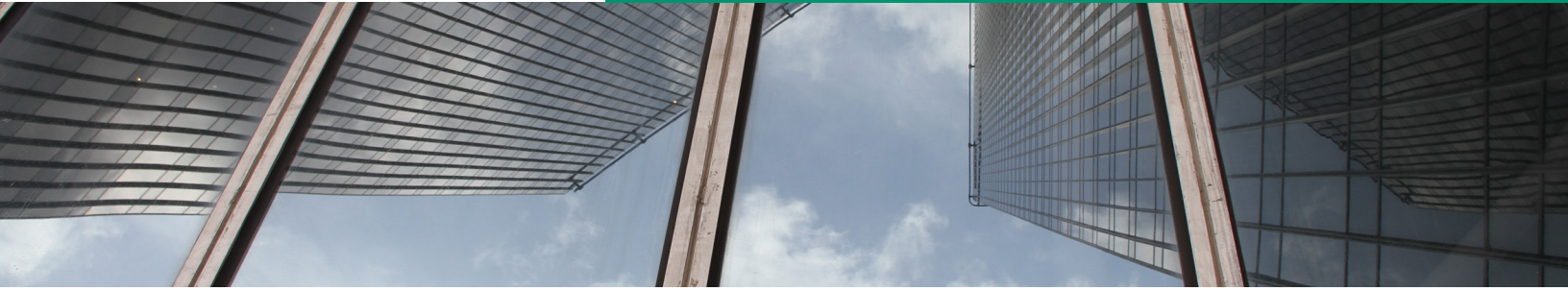
Hunton Services developed a holistic, “connected real estate” solution that replaced miles of disparate systems cabling and telephone wiring in the building. This approach entailed a single state-of-the-art, high-capacity fiber-optic backbone that converged every electronic system within the twin buildings – from the basement control rooms to the rooftop cooling towers. While common in new building construction, this type of holistic solution had never before been attempted in a building retrofit in Houston.

This integrated system also made it possible for tenants to activate their personal preferences – such as adjusting their office's temperature, turning on their lights, starting their coffeemakers and switching on their computers or TVs – simply by swiping their security system ID badge at any of Pennzoil Place's entrances. The possibilities are limited only by the imagination. As are management's opportunities to generate new revenue streams.

The property's physical plant was upgraded with the most technologically advanced and energy-efficient Trane chillers. With thoughtful planning and resourcefulness, the logistical challenges of making all this happen in a busy downtown setting were overcome. A service access was carefully

PENNZOIL TOWER

Building HVAC, Controls, & Retrofit



ENERGY SAVINGS

- **Energy Saved:**
6,223,860 KWH
- **Building Energy Use Intensity**
Before: 78.4
After: 66.5
- **Energy Star Rating**
Before: 77
After: 82
- **Energy Star EUI Average:**
193

ENVIRONMENTAL IMPACT:

CO₂ reduction = 4,391 metric tons

PROJECT TIME LINE:

- **Results Verification:**
2013
- **Project Completed:**
2013
- **Project Started:**
2011
- **Energy Evaluation/Audit:**
2012

cut into the sidewalk over the plant of the Rusk Street side, consistent with guidance from the City of Houston. This opening was barricaded, fitted with a structural frame and quickly converted into a permanent, yet inconspicuous, service portal that exists to this day.

◆ RESULTS

What began as a complex and difficult project is now a monumental success story. The property obtained its LEED Gold certification and payback for the retrofit has been impressive – with utility savings of \$525,394 in just eight months and estimated operating savings of \$1,127,054 annually. Maintenance and operating costs are dropping steadily as new efficiencies are realized with each passing day.

◆ WHY CHOOSE HUNTON GROUP?

In addition to world-class systems and innovative solutions, The Hunton Group is known for its expert and reliable people - the team that delivers energy efficient HVAC systems, top-notch facility service and parts support, sophisticated open control systems, financial solutions and now, as an independent energy producer.

◆ FOR MORE INFORMATION, CONTACT:

marketing@huntongroup.com
www.huntongroup.com

