

## Case Study

# The Innovation Slashes High Rise Hotel's Fuel Bills by 43%!

Customer	High Rise Hotel
Location	Georgia
Industry	Lodging
Sales Representative	Calloway Engineered Systems
AERCO Product Installed	Innovation 800



### What the Client Needed

When the hotel was built in 1996, it was fitted with two 500-gallon storage tanks and two copper-fin atmospheric heaters with rated efficiencies of 82%. Fast forward to 2012, and the system was not only inefficient, but failing. The new owner wanted the system replaced and upgraded to a high efficiency system, but its units were on the 17th floor. Would they need an expensive crane or rigger to install new units? The old system's atmospheric heaters used B-vents, which also needed to be replaced when upgrading to a high efficiency system.



### AERCO's Solution

The hotel's service contractor, John Rega of Garret and Rega Inc., knew its client needed an innovative, yet flexible solution. He recommended three AERCO Innovation 800 MBH water heaters, configured with an innovative onboard Water Heater Management (WHM) system.



The Innovation's on demand, tankless, 96% efficient design was the ideal choice for the hotel, because it met all of its unique needs, and then some:

- Small enough to fit through a standard doorway, the Innovation easily rode the elevator up to the 16th floor. Then, it was lightweight enough to rig up the final stairwell to the 17th floor mechanical room. No cranes or costly rigging required.
- The Innovations were easily sidewall vented with readily available PVC –drastically reducing installation costs.
- Once installed, the onboard WHM ensured continual, peak efficiency round the clock. It only runs units as they are needed... the rest are isolated via fully packaged motorized isolation valves.
- Since the units don't require water storage, there's no need to burn energy maintaining a set point of 140°F (the temperature that protects a large volume of water against Legionella bacteria). What's more, you're not wasting energy radiated to the surrounding area.
- The Innovations operate at a safer set point of 120°F – greatly reducing the risk of scalding, lowering radiation losses in the piping system, and lessening the level of lime scale buildup.

## **Return on Investment**

Before the upgrade, fuel bills averaged \$2,300 per month. After Innovations were installed, that figure plummeted to \$1,300. By slashing fuel bills 43%, the hotel is saving \$12,000 annually in addition to the initial installation savings. The Innovation-based system is much more reliable and easily meets daily demands of the 156-suite hotel.