

# Case Study

# The Innovation Provides the Ideal Retrofit for this Major Convention Center Hotel

Customer Convention Center Hotel

Location San Diego, CA

Industry Lodging

Sales Representative Dawson Company
AERCO Product Installed Innovation 1060



#### What the Client Needed

When the north tower of this major convention center hotel was built in 1984, its 681 rooms and 25 floors got their hot water from two 3000 MBH copper fin water heaters and a massive 7,000 gallon tank. After 15 years, the tank was severely leaking and was replaced with two gas-fired 2800 MBH 1,500-gallon storage tank heaters. The retrofit required an expensive crane to haul the oversized units to the 26th floor mechanical room. Within only a few years, the tank's heat exchangers failed, and the hotel was forced to rely on its old copper fins. By 2012, both tanks were leaking and were supplied by 30-year-old 80% efficient heaters. The tower would soon be out of hot water – the hotel needed to get a new system in place, with no expensive rigging, and no interruption in service.





## **AERCO's Solution**

The hotel tasked an engineering firm and The Dawson Company to design its new system. They recommended six AERCO Innovation 1060 MBH fire-tube water heaters. The on-demand, tankless, 96% efficient Innovations were the answer the hotel had long looked for:

- Small enough to fit through a standard doorway, the Innovations easily rode the elevator up to the 26th 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 Water Heater Management system ensured continual, peak efficiency round the
- Each unit offers 24:1 turndown so it can run as low as 45 MBH input, helping the units avoid cycling and keeping the system at highest efficiency
- The units' all-stainless-steel heat exchanger design ensures maximum longevity
- AERCO's OnAER Remote Monitoring Service monitors individual unit health, logs all critical operating parameters and helps prevent problems from developing

### Return on Investment

The hotel now enjoys 96% efficiency, compared to 80% previously. And thanks to the Innovations' unique tankless design, there's no need to store 3,000 gallons of standing water that has to be heated up only to be mixed down. The hotel recently hosted a large convention which put the facility at peak occupancy. The OnAER system showed that no more than three of the six installed Innovation units were required to handle the sustained peak load during the entire four days of the convention, which drastically reduced fuel bills and delivered a bigger ROI.



**Heating and Hot Water Solutions**