



# Honeywell West Boiler House Project Summary

## National Nuclear Security Administration Honeywell – Projects 1823, 1860 & 1865 West Boiler House Boilers & Chillers

Contract Value: \$17.1 Million

Duration: May, 2001 – June, 2004

Location: Kansas City, MO

**OWNER:**

DOE/Honeywell  
PO Box 419159  
Kansas City, MO 64141

**ENGINEER:**

Sega Inc. / Burns & McDonnell  
16041 Foster  
Stillwell, KS 66085 /  
9400 Ward Parkway  
Kansas City, MO 64114

**GENERAL CONTRACTOR:**

Foley Company  
7501 E Front Street  
Kansas City, MO 64120

**PROJECT SUMMARY:**

The project consisted of demolition and construction at the NNSA KC Plant, a part of the Federal complex, which is operated and managed by Honeywell, FM&T. Phase 1 of the project consisted of removing four, 100,000 (PPH) pounds mass per hour boilers, boiler control panels and annunciator panels, water softener, polisher, pumps, forced draft fans, deaerator, piping, controls and other existing ancillary boiler support equipment, and replacing them with new equipment including new micro-processor-based control panels and a boiler control room containing annunciator panels and system status indicators in the same general location in the West Boiler House. The project was essentially a one-for-one replacement with slightly reduced overall generating capacity. The project included extensive steam and condensate utilities requiring complex distribution and tie-ins due to the facility being a National Security Complex, full time 100,000lb hr tied in rental boilers running on rent for duration of project.

Phase 2 consisted of removal of four chiller foundations, existing equipment housekeeping pads and portions of 6 inch concrete floor slab. Removal of five 750 ton chillers, chiller and condenser piping, associated mechanical utilities, controls, vent lines, refrigerant monitoring piping, chiller and condenser water supply. Area 1 demolition consisted of removing two 750-ton Trane CFC R-11 low pressure chillers and all associated equipment. Area 2 demolition consisted of removing three 750-ton York CFC R-12 chillers and all associated equipment. New chiller foundations and modification to existing foundation, new housekeeping pads, new concrete floor slabs, new monorail beams, pipe supports both inside the Powerhouse and on the roof. New roof opening curbs for pipe penetrations, flashing for new wall and roof penetrations, patch/repair existing penetrations which were modified or abandoned. Project provided new chillers and transformer cabinets, chiller and condenser piping, chiller controls, vent and refrigerant monitoring piping, isolation and control valves, gauges, sensors, meters, flex connections and insulation.

Phase 3 was a duplicate of Phase 2 except for the removal of 5 chillers and installation of 4 Owner provided 1,250 ton chillers.