



TEI



SUCCESS STORIES KCP&L

CONDENSER MODULES W/TURNKEY SERVICES HAWTHORN UNIT #5

LOCATION KANSAS CITY, MO, U.S.A

CUSTOMER KCP&L

PROJECT OVERVIEW

Current Design

- + Tubes: Admiralty / SS304
- + Waterbox Design Pressure: 40 PSIG
- + Condenser Backpressure: 3.56 inHgA
- + Water Source: River

PLANT ISSUES

- + Condenser Performance
 - » Retube with same material is not an option
 - » Retube with stainless steel will result in performance loss
- + Future Installation of Cooling Tower
 - » Current waterboxes are not sized for higher pressure of future cooling tower
- + Tube Failures
 - » Plant experiencing many failures based on current operating conditions



TEI SOLUTION

- + New Condenser Modules with Titanium Tubes and Tubesheets
 - » Enhanced thermal performance
 - » Able to meet original performance
- + New Condenser Waterboxes
 - » More robust design for future cooling tower
- + Turnkey Services
 - » Removal of existing tube bundles and waterboxes
 - » Installation of new bundles and waterboxes

