

Client Contact

John Hays
Facility Services & Procurement
Manager with General Services
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Completion Date

January 2006

Contract Term

15 year Guaranteed Energy
Savings Program

Cost

\$13 Million

Annual Savings Guarantee

Cost Savings

- \$1.29 Million

Energy Savings

- 15 Million kWh (59.4 % reduction, electricity)
- 1,866 kW Avg/mo (40.8% reduction, electricity)
- (859,671) Therms (100.3% increase, natural gas)
- 64 Million gallons (33.1% reduction, water)

Emissions Reductions

Projected

- 5,086 Tons of CO2
- (3) Tons of NOX
- 0.5 Tons of SO2

Project Manager

Brian Elwell, PE
Burns & McDonnell
Energy Services

Project Design & Engineering

Burns & McDonnell
Engineering Company, Inc.



Plaza Building



Courthouse Square

Project Summary

Performed Investment Grade Audit and implemented the measures listed below. The Investment Grade Audit included detailed surveys of all buildings, analysis and modeling of a comprehensive list of energy conservation measures and associated cost estimates. Implementation includes the design, installation, and performance verification of the measures listed below.

Scope of Services

- New 1.25 MW Combined Heat & Power Facility (fuel switch)
- Conversion of Electrical Service from Secondary to Primary
- New Power Quality System
- High Efficiency Lighting Modifications
- Upgrade Chillers with Variable Frequency Drives
- Upgrade & Optimize the Existing Energy Management System
- New Air Handlers
- New VFDs and High Efficiency Motors on Fans & Pumps
- Convert Air Distribution System and Air Handlers to VAV
- New High Efficiency Boilers
- New Steam Distribution System to Optimize Boiler Performance
- New Low Flow Plumbing Systems in Detention Areas
- New Water Treatment Systems on Cooling Towers & Laundry for Water Conservation.
- New Irrigation Controls for Water Conservation.
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Key Project Benefits

Burns & McDonnell developed and administered multiple rebates through two rebate programs. The Standard Performance Contract (SPC) Program was utilized to generate over \$500,000 of rebates for the County of Fresno. The Self Generation Incentive Plan (SGIP) was utilized to generate \$1 million of rebates for the cogeneration facility.