



Facilities Management Division

Energy Management & Sustainability Section

Mark Hardcastle, Chief

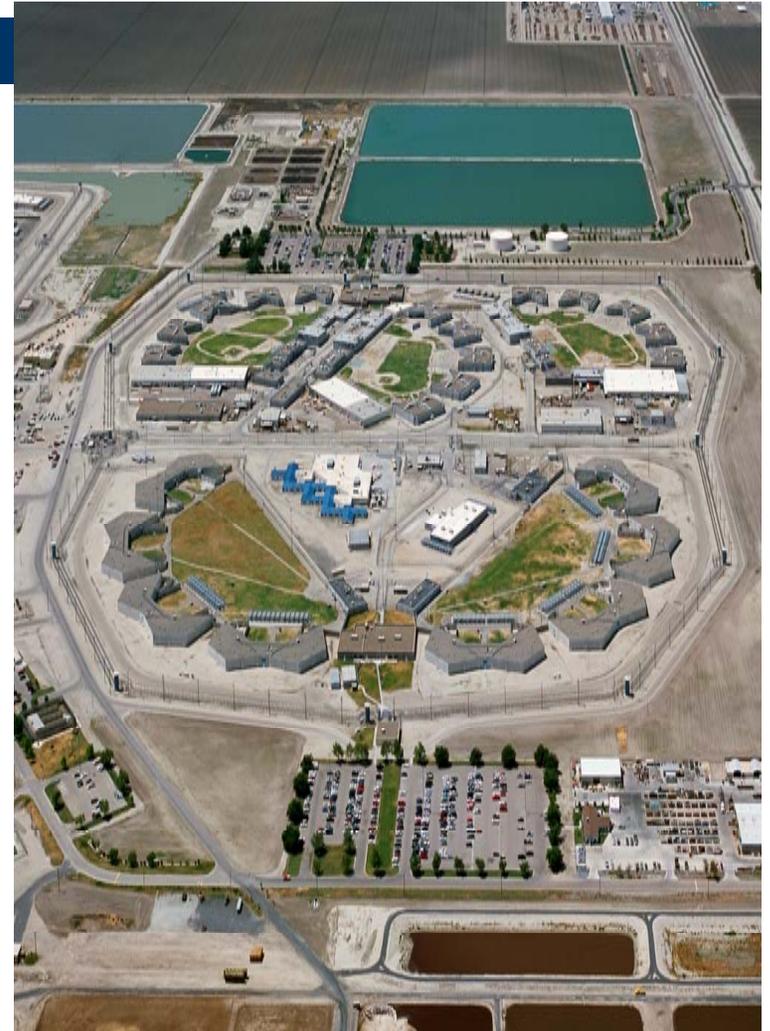
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Analyst

ARRA Funded Projects

- Loan Total - \$4,108,998.00
- Sites:
 - Corcoran State Prison (Two projects)
 - California Correctional Institution
 - Salinas Valley State Prison
 - Correctional Training Facility
- Completion Time – 6 months from NTP

Corcoran State Prison

- Institution Information
 - Opened 1988
 - Level I, III, IV, AdSeg, and SHU
 - Inmates:
 - Design Capacity – 3,396
 - Actual Count – 5,544
 - 1,768,000 ft²
 - Annual Usage & Costs:
 - Electricity
 - 65,663,370 kWh, \$5,974,338
 - \$.091/kWh
 - Gas
 - 1,904,973 Therms, \$1,505,642
 - \$.790/Therm



Corcoran State Prison

- Scope Project 1
 - HID Lighting Retrofit
 - Replace 2,135 HID with Induction fixtures
 - 95% Interior HID fixtures
 - 5% Exterior HID fixtures
 - Costs:
 - Total \$1,618,158
 - \$1,142,272 ARRA Loan
 - \$ 475,886 IOU Partnership Incentive
 - Annual Savings:
 - \$180,440
 - 1,982,859 kWh
 - 366kW

Corcoran State Prison

- Scope Project 2
 - Energy Management System (Completion Phase)
 - Controls added to 244 HVAC and Hot Water Pump System
 - 868 tons of Mechanical Cooling Capacity
 - 80 HP of Hot Water Pumps
 - Costs:
 - Total \$1,463,999
 - \$ 764,067 ARRA Loan
 - \$ 699,932 IOU Partnership Incentive
 - Annual Savings:
 - \$ 292,878
 - 2,637,607 kWh
 - 66,906 Therms
 - 41kW

California Correctional Institution

- Institution Information
 - Re-Opened 1954
 - Level I, II, RC, IV, and SHU
 - Inmates:
 - Design Capacity – 2,781
 - Actual Count – 5,758
 - 1,489,104 ft²
 - Annual Usage & Costs:
 - Electricity
 - 20,156,436 kWh, \$1,759,297
 - \$.087/kWh
 - Gas
 - 2,100,631 Therms, \$1,505,642
 - \$.811/Therm



California Correctional Institution

- Scope
 - Central Steam Plant provides domestic and space heating hot water to level 4A and 4B
 - Hot water has to travel approximately 3 miles to get to Level 4A&B
 - Remove Level 4A and 4B housing units from the central steam boiler loop.
 - Install high efficiency boilers locally at Level 4A & 4B.
- Costs:
 - Total \$1,234,950
 - \$ 786,400 ARRA Loan
 - \$ 448,550 IOU Partnership Incentive
- Annual Savings:
 - \$317,476
 - 430,116 kWh
 - 345,322 Therms
 - 49kW

Correctional Training Facility/ Salinas Valley State Prison

- CTF Information
 - Re-Opened 1946
 - Level I and II
 - Inmates:
 - Design Capacity – 3,301
 - Actual Count – 6,997
 - 1,357,628 ft²
 - Annual Usage & Costs:
 - Electricity
 - 14,749,750 kWh
 - \$1,349,309
 - \$.100/kWh
 - Gas
 - 1,447,294 Therms
 - \$1,211,696
 - \$.840/Therm
- SVSP Information
 - Opened 1996
 - Level I thru IV
 - Inmates:
 - Design Capacity – 2,224
 - Actual Count – 4,555
 - 1,250,000 ft²
 - Annual Usage & Costs:
 - Electricity
 - 19,007,702 kWh
 - \$1,705,522
 - \$.090/kWh
 - Gas
 - 424,679 Therms
 - \$358,340
 - \$.840/Therm

Correctional Training Facility/ Salinas Valley State Prison

Correctional Training Facility



Salinas Valley State Prison



Correctional Training Facility/ Salinas Valley State Prison

- Scope
 - SVSP
 - T12 to T8 lighting retrofit
 - HID to T5 lighting retrofit
 - Replacement of water heaters for 180 and 270 housing units
 - Condenser coil replacement
 - CTF
 - Replace old inefficient boilers with new energy efficiency Muira boilers and controls
 - Replace Air Handler Unit Motors
 - Upgrade South Administration Building Controls and sensors
- Combined Costs:
 - Total \$1,234,950
 - \$ 1,984,393 ARRA Loan
 - \$ 568,134 IOU Partnership Incentive
- Combined Annual Savings:
 - \$361,461
 - 1,034,517 kWh
 - 319,850 Therms
 - 191kW