



SAN FRANCISCO CIVIC CENTER

San Francisco, California



\$700K

Verified Annual Savings

16,139 MMBTU

Verified Annual Energy Savings

At a glance

CEG Solutions implemented a \$45M ESPC at the historic San Francisco Civic Center, modernizing aging systems and introducing an open-source control platform to deliver 38% energy savings and secure, resilient operations.

Project Highlights

- Historic two-building, city-block complex
- \$700K verified annual savings
- 16,139 MMBtu annual energy savings
- 38% reduction in total energy use
- \$180K savings above guarantee (33%)
- New open-source BAS system replacing proprietary controls

OVERVIEW



The Civic Center's Earl Warren Building (1922) and Hiram M. Johnson State Office Building (1998) presented unique challenges: historic preservation requirements, aging infrastructure, and a nonfunctional proprietary controls system. As home to the California Supreme Court and multiple state offices, all upgrades had to be completed after hours to maintain secure, uninterrupted operations. The State required whole-building (Option C) M&V to verify actual savings at the utility meter level.



STRATEGIES



Energy & Operational Efficiency, Performance Assurance, Performance Contracting, Resiliency



Exceeding Guaranteed Savings

This project achieved \$180K **more savings** than guaranteed, exceeding projections by 33%.

Energy Conservation Measures

- LED Lighting retrofits
- Cooling Tower Controls Upgrades
- Demand Response Program
- Occupancy Control of Lighting
- Hot Water Pump Recommissioning
- RCx Economizer & Building Pressurization Controls

SOLUTIONS



CEG designed and implemented 11 ECMs to cut energy and water usage, renew infrastructure, and reduce costs. Using 315 sensors/loggers with cellular modems, CEG analyzed 16.1M data points to create custom control strategies and implement demand response load shifting. A new EMS enabled advanced control and trending, simplifying Option C M&V. Measures included LED retrofits, upgraded economizer & pressurization controls, hot water pump recommissioning, cooling tower control upgrades, and advanced lighting occupancy controls.

RESULTS



The project delivers \$700K in verified annual savings and reduces energy use by 16,139 MMBtu — a 38% reduction across the campus. Whole-building Option C M&V confirmed that measured savings exceeded the guarantee by \$180K (33%). The new open-source BAS eliminated dependence on proprietary systems, improving flexibility and long-term resilience.

