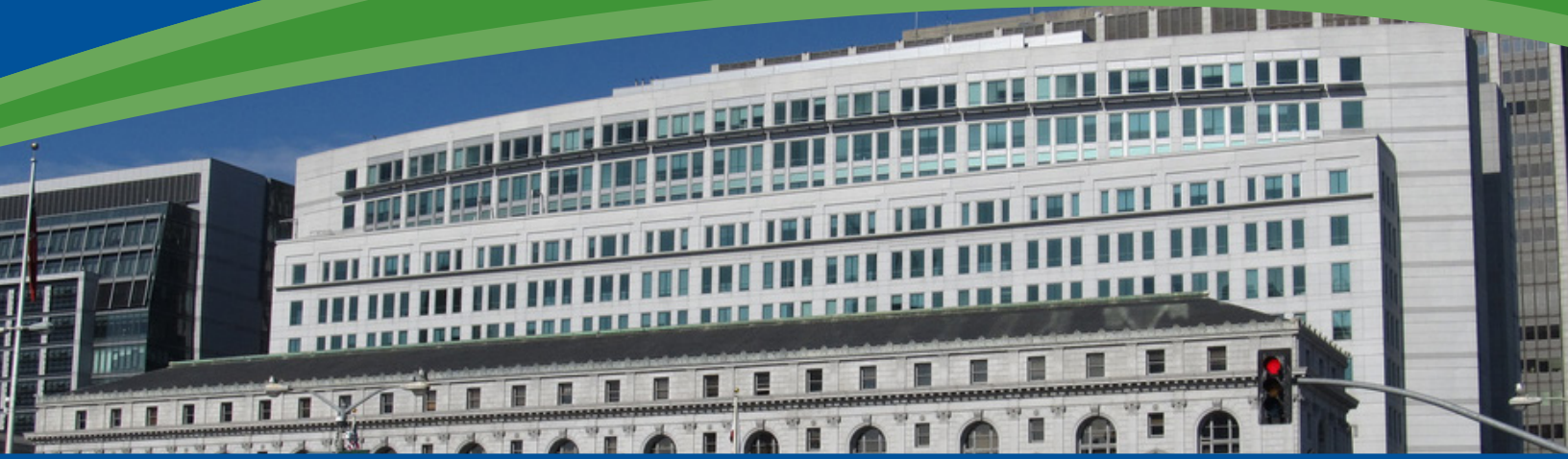




CASE STUDY

San Francisco Civic Center

www.cegsolutions.com



About the Project

In 2017, CEG Solutions (formerly Clark Energy Group) (CEG) was awarded an ESPC for the California DGS Ronald M. George (RMG) State Office Complex. RMG is a historic two-building office complex located in San Francisco's downtown Civic Center. The two buildings are interconnected and they encompass a full city block. RMG houses the California Supreme Court, the Judicial Council of California, and the Administrative Office of the Courts, auditoriums, cafeterias, data centers, and numerous office and administrative facilities serving a variety of other State offices and agencies.

Key Challenges:

- Historic facilities: The Earl Warren Building was constructed in 1922 and designated as historic.
- Previous extensive renovations: The Hiram M. Johnson State Office Building was constructed relatively recently in 1998, at which time HVAC and lighting upgrades were made to the historic Earl Warren building.
- Nonfunctional controls system: The facility's existing controls system, such that simple controls changes required intensive upgrades.
- Requirement for Option C M&V: The client required savings to be measured and verified based upon the change in usage at the building's utility meters.

The CEG Solution:

CEG is delivering a comprehensive set of 11 ECMs to renew infrastructure, reduce energy and water usage, address long-term challenges with the existing control system, and reduce operating costs. CEG employed 315 sensors/loggers along with cellular modems for real-time collection of data and analyzed 16.1 million data points, allowing CEG to develop custom control solutions and implement demand response load shifting. ECMs include HVAC airside control strategies, lighting upgrades and controls, cooling tower optimization, and heating hot water system upgrades.

CLIENT

California Department of General Services

LOCATION

San Francisco, CA

YEAR

2017-Ongoing

PROJECTED RESULTS:

- 38% reduction in annual energy consumption
- Installation of new EMS
- Improved facilities management
- Reduced operations and maintenance costs
- 3.7 million kWh per year in electricity savings
- Annual cost savings of \$740,000

FINANCIAL

Project Cost:
\$13,100,000

ESTIMATED SAVINGS:

\$27,102,800

Simple Payback:
15.6 Years