



OC FACILITIES MAINTENANCE & CENTRAL UTILITY FACILITY ensures the efficient and innovative operation of County facilities through maintenance management services, after-hours emergency support, building automation and utility management. A major component is the Central Utility Facility (CUF), a combined heat and power facility that provides cooling, heating and/or electricity to 23 buildings within the Santa Ana Civic Center area.

CORE SERVICES:

- **Utilities and Engineering Unit** – Ensures production of electricity for \$0.11 K/Wh.
- **Building & Automation Unit** – Provides utility management for 215 facilities, totaling over 9 million square feet.
- **Repair and Preventative Maintenance** – Oversees proper operation and repair of OCPW facilities and provides after-hours emergency services.
- **Consultation and Project Scoping** – Consults for a broad spectrum of clients including other County departments and agencies located in buildings owned or leased by the County.

SERVICE AREA HIGHLIGHT:

The generator within the Central Utility Facility (CUF) is the only known governmental facility in California to use cogeneration to power governmental buildings, including a jail facility.



FUN FACT

In addition to custodial services, employs trade groups such as electrical, HVAC, elevator, plumbing, carpentry, locksmith and metalsmith.



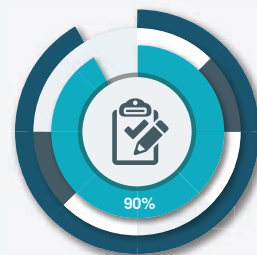
SERVICE AREA GOAL

Collect data for County facilities and populate the County's Centralized Maintenance Management System, representing 75% of the system's full implementation by end of 2019.



KEY PERFORMANCE INDICATOR

Achieve 90% initial response on service requests within 72 hours.



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Cogeneration Explained:

Cogeneration is the simultaneous production of electricity and heat. **Did you know that cogeneration is used for heating and cooling most government facilities in the Civic Center?**

The turbines are filled with

2.3 million
cubic feet of air per hour



AIR



FUEL

Combustion
Turbine



Each turbine spins at
14,951 RPM!

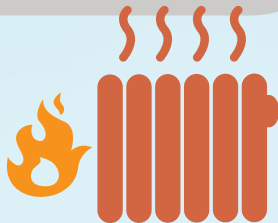
The CUF took a
combined
159,000
hours to build!

Roughly one
lifetime.



The CUF produces

31 million pounds
of steam per month, on average



Heat Recovery
Steam Generator



Chillers

The CUF produces
770 million BTU
of chilled water
per month



The CUF can cool up to

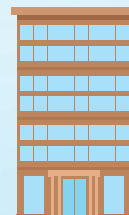
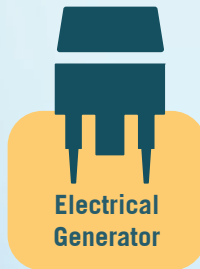
6,400,000 sq ft
at the Civic Center Campus

Reduced emissions by the
CUF is equivalent to taking
2,500 cars off the road



The generator can
produce up to
10,400 kW
of energy

Electrical
Generator



The CUF serves
16 Buildings with electricity
18 Buildings with steam

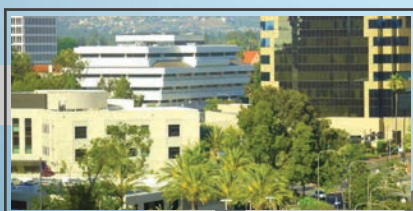


Exhaust gases recovered from the
electrical generator reach up to

1000°F

41 miles

of new electrical wire installed at the Civic Center Campus



3 miles of new piping

distributes steam and chilled water to heat and
cool most government facilities in the Civic Center