



Molina Healthcare

LONG BEACH, CA

VALUE DELIVERED

EMCOR Services Mesa Energy provided a two-phase mechanical system retrofit for two Molina Healthcare office towers to help reduce energy consumption and address increasing operating costs.

Our innovative thermal energy storage (TES)-based plant solution reduces the buildings' overall utility demand by 1,140 kilowatts, and annual energy consumption by 755,775 kilowatt hours.

This TES system shifted 950 tons off the on-peak period, which helped Molina Healthcare obtain a Southern California Edison rebate of approximately \$997,500.

As a result of the project, annual operating costs for the buildings are expected to go down \$248,842 annually.



CLIENT OBJECTIVES

Due to equipment age, lack of cooling capacity, and frequent compressor failures, the client needed inefficient HVAC systems replaced in two 15-story towers to help improve efficiency and achieve sustainable energy savings.

SOLUTIONS

EMCOR Services Mesa Energy delivered a complete HVAC system retrofit in two phases, performing our work in tight quarters while the buildings were fully occupied. Our crews worked nights and weekends to ensure the project stayed on schedule, and didn't interfere with normal business operations.

CASE STUDY

OPERATING COMPANY

EMCOR Services Mesa Energy

CLIENT

Molina Healthcare



mesaenergy.com
949-460-0460



Molina Healthcare

LONG BEACH, CA

COMMERCIAL

OFFICE BUILDING/REAL ESTATE

CASE STUDY

SOLUTIONS (CONT'D)

Our Phase 1 solutions included:

- Installation of cooling towers between two parking structures
- Construction of a modular chiller plant designed to accommodate our Phase 2 TES system, consisting of two 450-ton water-cooled centrifugal chillers to produce up to 330 tons of cooling during regeneration or ice-build mode, and one 200-ton variable-speed screw chiller on a variable primary flow pumping platform to provide up to 1,100 tons of cooling to air handling unit (AHU) chilled water coils
- Installation of chilled water piping from the plant, through the parking structure, and up through return air shafts to both penthouse AHU systems

In addition to demolition and excavation services, our Phase 2 solutions included installation of:

- An energy-efficient, 6,000-ton-hour ice-based TES system
- Thermal storage unit modules
- Heat exchangers
- Pumps
- Direct digital controls
- Caissons
- Columns
- Foundations
- Structural steel
- Electrical wiring

We also installed polypropylene piping for the condenser water loop that is environmentally-friendly; resistant to corrosion, abrasion, and chemical breakdown; and engineered for a 50-year lifecycle.

CLIENT BACKGROUND

Molina Healthcare is a managed care company serving more than three million people through government-based healthcare programs.

