



CASE STUDY

Westgate Casino Energy Efficiency

Engineer of Record for Multi-Phase Partnership Approach

Westgate Casino in Las Vegas, owned by Westgate Timeshare Resorts from Orlando, FL, and considered to be the largest hotel in the world until 1990, consists of 3,100 guest rooms, a large casino gaming floor, several restaurants, meeting rooms, expansive convention spaces and the city's Sport Book venue. Rich Energy Solutions proposed a multiple-phased partnership approach to reduce the energy costs in the building over a 3-year period, using the energy savings, rebates, and maintenance savings to pay for future phases over time.

THE CONCORD DIFFERENCE

- Proven track record for excellence in facility systems design engineering including Mechanical/HVAC, Electrical, and more.
- Expertise in national energy markets, providing energy advisory and consulting services to improve bottom-line financial performance .

THE CHALLENGE

- A building survey found there were 204 large air handling units being controlled by 7 outdated building management systems
- Some of the air handling units were DOS-based with only temperature readings and localized control
- The need to reduce energy costs to create positive cash flow for later project phases

CONCORD ENGINEERING SOLUTION

- Develop a comprehensive plant to migrate the largest HVAC units one at a time onto a new web-based open protocol platform
- Optimization of a chiller plant software package, saving an average of 2,000-tons of chiller operation using algorithms to modulate the system's equipment based on occupancy, outdoor air temperatures, and demand
- Installation of an LED lighting retrofit with more than 20,000 Philips LED lamps
- Produce a 38% internal rate of return amounting to annual savings of over \$1,3M

+ LOCATION

Las Vegas, NV

+ SERVICES

Commercial Engineering
MEP/FP Design
Engineer of Record
Energy Efficiency

+ PARTNERS

Rich Energy Solutions

+ TAGS

Gaming Engineering
High-End Entertainment
High-Performance MEP/FP

GET IN TOUCH

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