



# El Cortez Hotel & Casino

## A Case Study: Lighting Upgrade Modernizes Historic Hotel



Located just two blocks from the renowned Fremont Street entertainment mecca in downtown Las Vegas, Nevada, the El Cortez Hotel & Casino holds a position of local respect and tenure. Once owned by legendary mobster Bugsy Siegel, the El Cortez's original building dates back to the 1940s and serves as a vestige of the original Vegas that pre-dates the Strip. Today, the 710,000 square-foot hotel offers 299 guestrooms and suites in a 14-story, sand-colored tower or pavilion building and boasts oversized guestrooms, a barber and beauty shop, 24-hour dining, and a 40,000 square-foot casino.

As part of a continuous effort to update the hotel's infrastructure and amenities at the most optimal cost, the El Cortez's management team recently agreed to undertake an extensive lighting upgrade to improve the facility's lighting and reduce energy costs while maintaining the building's old-fashioned Las Vegas ambience.

Previously illuminated with older T12 fluorescent lamp technology and magnetic ballasts in the main hotel, inefficient incandescent lamps throughout the facility, and 100W low pressure sodium lamps in the parking garage, the facility's lighting system offered many opportunities for cost and light level improvement. Norman, Oklahoma-based energy service company Performance Consulting Group, LLC proposed and oversaw the installation of over 3,100 energy-efficient T8 fluorescent lamps and nearly 1,500 compact fluorescent lamps from Philips Lighting Company driven by 5,100 Centium® electronic ballasts. In the body of the hotel, the replacement of incandescent exterior and interior lighting with cold cathode lamps, which offer 25,000 hour rated lamp-life, resulted in up to 90% energy savings. And bright and efficient

fluorescent T5 technology replaced the outmoded yellow light cast by low pressure sodium in the parking garages, enhancing safety and security for patrons and employees, while highly-efficient LEDs installed in 137 exit signs minimized energy consumption and maintenance concerns.

"The installation of energy-efficient T8 and T5 lamp technology driven by electronic ballasts offered a range of benefits to the El Cortez Hotel," confirmed Philips Lighting Electronics N.A. Sales Representative and C.L.E.P. Marc McCord. "In addition to improving light levels and standardizing the lighting throughout the facility, the upgraded system reduced energy consumption and costs by as much as 40% relative to the less-efficient T12 system previously in place."

Overall, the upgrade paid itself back in just 1.5 years and drove savings of 340 kW as well as annual energy reduction of over 1.6 million kWh. As a function of these outstanding energy savings, the project also qualified for an attractive \$18,000 incentive from local utility Nevada Power. Said PCG President Ron Murray, "by working closely with Nevada Power and their SureBet Program, we helped the El Cortez qualify for \$18,000 in SureBet business incentives by implementing a capital lighting improvement that resulted in material reductions to the utility's electricity load during peak hours."

These impressive results delighted and were immensely appreciated by the hotel's entire management team. According to Mike Nolan, General Manager of the El Cortez, "this project has significantly reduced the amount of energy consumed while providing improved light levels in all areas of our facility."

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Thanks to their successful lighting upgrade, the El Cortez Hotel & Casino now sports a modern and energy-efficient lighting system that helps retain the hotel's legacy as an integral part of Las Vegas culture and history.

A leader in the ballast industry for over 60 years, Philips Lighting Electronics N.A., based in Rosemont, Illinois, offers a full line of Philips Advance branded ballasts and drivers for fluorescent, HID, and LED light sources to the market's broad range of lighting fixture manufacturers and electrical distributors. For more information on Philips Lighting Electronics' complete product line and range of Smart Solutions™, visit our website at [www.philips.com/advance](http://www.philips.com/advance) or call us at (800) 322-2086

Project Overview	
Project Site:	The 710,000 square-foot El Cortez Hotel & Casino, located in downtown Las Vegas, Nevada )
Project Scope:	Conversion of existing T12 lamps and magnetic ballasts, incandescent lighting, and low pressure sodium lighting throughout the hotel, casino and garages to a system involving more efficient T8 fluorescent, T5 fluorescent, and compact fluorescent lamps driven by electronic ballasts to improve light levels and reduce energy costs and maintenance concerns
Project Timetable:	Completed in 2005
Products Involved:	The project involved over 4,600 T8 and T5 fluorescent lamps from Philips Lighting Company driven by 5,100 Philips Advance Centium® electronic ballasts
Energy Service Company:	Norman, Oklahoma-based Performance Consulting Group (PCG), a Nevada SureBet approved contractor
Financial Incentives Awarded to Project:	An \$18,000 SureBet Business Incentive from Nevada Power for reducing electricity load during peak hours
Estimated Energy Savings With New System:	340 kW and annual energy reduction of over 1.6 million kWh
Project Payback Period:	1.62 years



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