

# Luxor West Bank Lighting Project, Valley of the Kings and Queens

## Client

Misr Company of Sound, Light, and Cinema

## Scope of Work

Detailed design

## Location

Luxor, Egypt

## Types of Activities

Electrical

Located in Luxor, the world's greatest archaeological open-air museum, the "West Bank Lighting Project" aimed to boost the city's tourism revenues and commercial activity; enhance the West Bank's security system; and extend tourist activity hours (currently restricted to daytime only) into the night to accommodate nighttime city visitors.

Engaged as the project's power supply consultant, ECG was responsible for the design of a low-voltage power supply system that respected the globally unparalleled historic terrain, maintained the integrity of its unique topography, and offered a secure and reliable setting showcasing a sensational panorama of a professionally lighted West Bank. ECG undertook this project in collaboration with the international consultants "LUMIERE" and its mother company "CITELUM Group", France, who were handling the project's lighting concept design.

ECG's low voltage electrical designs involved the positioning and rating of a substantial number of

camouflaged lighting fixtures/racks, panels, cable routing schemes, hand holes, and the transformers main distribution boards. With a total rating of 469 kW, nine hundred ninety two projectors were to light up the rocky elevations, particularly underscoring temples/tombs entrances for East Bank viewers. Three hundred up-lighters featuring a total rating of 45kW focused their beams on the rural strip palm trees. Other electrical system design components needed for this massive scheme entailed nine transformers mains with a total rating of 1,000kVA, fifty-eight distribution panels, twenty-three kilometers of cables, and twenty-one kilometers of wiring. All equipment selected ensured complete compatibility with site integrity in terms of color; texture; future maintenance; durability; equipment protection in case of volatile electric current fluctuations, complete outages, transients, and inrush current; as well as ongoing archaeological exploration and excavation plans.

