Cairo Festival City 66/22 KV Substation

Client

Al-Futtaim Real Estate Development (SAE)

Scope of Work

Concept design Detailed design Construction supervision Commissioning and handover

The project comprised the design, construction supervision, commissioning and handover of a 66/22 kv electrical substation and its connection cables with the external main grid to feed the Cairo Festival City (CFC) project.

The 66/22 kv substation is part of the site wide infrastructure and associated projects for Cairo Festival City located at the 5th Conglomerate in New Cairo. The said substation is interconnected with New Cairo Station, 12 km apart throughout 630 mm² cables (route no.1) and with Zahraa Madinet Nasr-Police Academy Station, 3.5 km apart throughout 400 mm² cables (route no.2).

The CFC Substation is built on an area of 3,042 m², and consists of five buildings as follows:

Location

New Cairo, Egypt

Types of activities

Architectural

Civil works

Communications and security systems

Electrical

HVAC

Piping

Mechanical

Structural

- 66 kv building (66 kv switchgears and bus bars): consists of one floor with a footprint area of about 650 m².
- 22 kv building (22 kv switchgear, control hall, AC/DC room, telecommunication room, battery room and auxiliary transformers): consists of basement and two floors with a footprint area of about 385 m².
- Guard room: consists of one floor with a footprint area of about 20 m².
- Fire-fighting room: consists of one floor with a footprint area of about 25 m².
- Store room: consists of one floor with a foot print area of about 28 m².
- Underground water tank and pump room: with a foot print area of about 85 m².







