

Al-Wafra Substation and Overhead Transmission Line (400 KV)

Client

Dornier Heat and Power GmbH

Ultimate Client

Gulf Cooperation Council Interconnection
Authority (GCCIA)

Scope of Work

Tender Action Support
Construction Supervision

Location

Kuwait – Saudi Arabia - Iraq

Type of Activities

Civil
Electrical
HSE

GCCIA executes 400 KV OHTL from Al-Fadli 400 KV substation in Saudi Arabia to Al-Faw 400 KV substation in Iraq through the execution of Al-Wafra 400 KV substation in Kuwait to transfer 500 MW in the first phase, with a total of 1,800 MW.

The project includes the supply and installation of circuit breakers, electrical reactors, and measurement and control systems for the construction and expansion of substations in Al-Wafra and Al-Faw. This contributes to the supply of electricity to the Southern Region Electricity Network and supports the demand for electricity in Basra. It also lays the foundations for future exchange and trade of electric energy between the Gulf state and Iraq under the umbrella of the regional and Arab electricity market to ensure the sustainability of electric power.

Al-Wafra 400 KV Substation in Kuwait occupies a land of 280 m x 180 m. It consists of GIS building (130 m x 20 m),

telecom and control buildings, security room and seven gantries to support electricity transaction from Saudi Arabia to Iraq. It also consists of a 400 KV OHTL route with 15 km length through the first portion of 1/5, within 78 electrical steel towers to support two parallel lines (39 towers each) from Al-Wafra substation to Kuwait-Saudi border.

In addition, the 400 KV OHTL route in Saudi Arabia passes through the second portion of 1/5 with 35 km length from Al-Fadli lines to Kuwait-Saudi border.

The project also includes renovation and upgrade of Al-Faw 400 KV substation in the South of Iraq. This includes a 400 KV OHTL route that passes through the portion of 5/5 with 85 km length from Al-Faw station to Iraq-Kuwait border.



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