

400 KV Al-Faw Substation and OHTL

Client

VPC

Scope of Work

Construction Supervision

Location

Basrah, Iraq

Type of Activities

Electrical

The project (Al-Faw substation 400/132/11 KV) comprises the following:

1. 400 KV substation consisting of five bays of breaker-and-half configuration to make ten feeders; six for the overhead transmission lines and four for the 4 Auto-Transformers 400/132/11 KV, each with a capacity of 250 MVA (total capacity of 1,000 MVA).

- Phase Power Transformer Model: TL 1950 C
- Year: 2014
- Standard: IEC 60076
- Type of Oil: Ergon Hyvolt I
- Rated Frequency: 50 Hz.
- Method of Cooling: ONAF
- Temp Rise of Oil Max: 50K

- Temp Rise of Average Winding: 55 K
- Ambient Temperature Max: 50 Degree
- Hot Spot: 68 K
- Vector Group Single Phase I AO IO
- Vector group three phase YN AO D11

2. Four Auxiliary Transformers 400 KVA-11/0.4 KV (Type: OCREV, Made in Italy, 1000 KVA, Frequency: 50 Hz., Year: 2019, Voltage: 11 / 0.4 KV, Vector Group: Dyn11).
- Equipment of the substation (400KV, 132 KV, G.I.B.) are of G.I.S. type
 - Equipment brand type is GE "Alstom"
 - Protection equipment brand type is "Micom" France



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