

Services Provided

TSA have undertaken various design services within the Middle East with individual experience gained either directly with TSA or via working through other bodies. Services have included:

- Design of Mechanical and Electrical services
- Witnessing of site commissioning
- Contractual dispute resolution

Project Experience

Please note that the projects below serve to illustrate TSA individuals experience in working in the Middle East.

Great Man-Made River Phase 2 – Libya

- Responsible for power and electrical building services design.
- Production of single line diagrams for pumping stations and ancillary services.
- Specification of 33 kV, 11 kV and 380V switchgear and transformers.
- Specification of motor control centres including 11 kV and 3.3 kV direct-on-line starters and 11 kV variable speed Kramer drives.
- Load calculations for normal and abnormal operation including transformer voltage regulation studies under both base load and motor starting conditions.
- Design of protection relay system including device co-ordination. Power system analysis by use of software.
- Production of interconnecting wiring diagrams

Military Base – Oman

- Attendance at factory witness testing
- Witnessing site commissioning of HV/LV switchgear and frequency converters.

Amiri Air Flight – United Arab Emirates

- Site surveys
- Site testing
- Problem investigation and recommendations
- Resolution of disputes between contractor and client
- Design of remedial works
- Site witnessing and testing of completed installation

Jeddah Housing – Saudi Arabia

- Design of M&E services for housing complex