

105393-ELE-1OS-E-2006
Field & Control Room Operation Engineer

Holds B. Sc. in Electronics & Communications Engineering and M. Sc. in Environmental Engineering Management & Technology. Has over 7 years hands-on experience working in operation, commissioning and start-up at Talkha Power Plant.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 15/07/1982
Gender : Male
Marital Status : Married
Residence : Dakahlia

EDUCATION

: B. Sc. in Electronics & Communications Engineering, Mansoura University, 2006
: Master of Science in Engineering (Environmental Engineering Management & Technology), 2016
: PhD student (Department of Electrical Engineering)

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel), Internet

TRAINING COURSES AND CERTIFICATIONS

: Simulation of 250MW Gas Turbine Operation (MDEPC).
: Simulation of 250MW Steam Turbine Operation (MDEPC).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2010 till now
Employer : Middle Delta Electricity Production Co.
Project : Talkha Power Plant:

- New Talkha 750MW Combined Cycle Project located within the boundaries of the existing Talkha Power Generation Compound. The site is located in Talkha City. Dakahlia Governate, on the west Bank of the River Nile, Damietta Branch, Egypt.

- The facility is designed to include a power block consisting of two 250MW (nominal, ISO) combustion Turbine generator (CTG), each feeding exhaust gases to its respective heat recovery steam generator (HRSG).
- Steam from the two HRSGs is fed to one 250MW (nominal), re-heater condensing steam turbine generator (STG). The facility's net output is 750MW (nominal, ISO).
- This output is achieved by burning natural gas in the combustion turbines with no supplementary firing in the HRSGs. Nitrogen oxides emitted are controlled by dry low nitrogen oxides combustors.
- An inlet air filtration system is included to supply suitable filtered combustion air to the CTGs. The steam exhausted through the steam turbine is dumped into a once-through cooling single-pass divided water-box condenser.
- Power is generated at manufacturer's standard voltage in the CTGs and the STG, stepped-up through main transformers, and fed to the utility grid via the existing 220KV, gas insulated switchgear (GIS) switchyard. The Power Plant cooling water is withdrawn from Damietta Branch of the Nile River.

Job title : Field & Control Room Operation Engineer

- Job Description** :
- Shift Engineer.
 - Participate in construction, commissioning and start-up of SIEMENS V94.3A gas turbine.
 - Operation of 2x250MW SIEMENS V94.3A gas turbine Teleperm XP and TS 3000 control systems and associated Auxiliary DCS.
 - Monitoring the operation of power generating units to ensure reliable and efficient power generation and to detect evidence of operating problems.
 - Preparing procedures for units start-up, shutdown and preparing for planned maintenance.
 - Performing the units start-up and shutdown as per assigned targets.
 - Trouble shooting, effective response to emergency conditions and compliance to safety procedures.
 - Diagnose and resolve day to day operational problems.
 - Raising defects for equipment & doing isolation and de isolation procedures according to the work permit.
 - Perform high & medium voltage switching operations.
 - Handling plant firefighting equipment and network.
 - Control auxiliary equipment, such as pumps, fans, compressors, condensers, feed water heaters and filters to supply water, fuel, lubricants, air, or auxiliary power.
 - Take regulatory action, based on readings from charts, meters and gauges, at established intervals.
 - Open and close valves and switches in sequence to start or shut down auxiliary units.
 - Record and compile operational data by completing and maintaining forms, logs, or reports.
 - Make adjustments or minor repairs, such as tightening leaking Gland and pipe joints.
 - Regulate equipment operations and conditions, such as water levels, based on instruments and computers data.
 - Inspect records or log book entries or communicate with plant personnel to assess equipment operating status.

- Start or stop generators, auxiliary pumping equipment, turbines, or other power plant equipment as necessary.
- Control power generating equipment, including boilers, turbines, generators, or reactors, using control boards or semi-automatic equipment.
- Communicate with systems operators to regulate and coordinate line voltages and transmission loads and frequencies.
- Adjust controls to generate specified electrical power or to regulate the flow of power between generating stations and substations.
- Control generator output to match the phase, frequency, or voltage of electricity supplied to panels.
- Place standby emergency electrical generators on line in Emergencies and monitor the temperature, output, and lubrication of the system.
- Receive outage calls and request necessary personnel during power outages or emergencies.