### 103866-MEC-1OS-E-2009

# SCE/CCR Supercritical Boiler Commissioning & Operation Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 11 years hands-on experience working in operation, commissioning and start-up at Power Plants.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 02/02/1987

Gender : Male
Marital Status : Married
Residence : Suez

### **EDUCATION**

B. Sc. in Mechanical Power Engineering, Assiut University, 2009

#### LANGUAGES

Arabic : Native Language

English : Very Good

## **COMPUTER SKILLS**

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

Matlab

## TRAINING COURSES AND CERTIFICATIONS

: PLC basic S7.

: Solid Works

: General English language.

: ICDI

Training courses in power plant.

: Basic Course of steam power station.

: Advanced Course of steam power station.

: Training courses for Turbo generator operation as performed by GE Steam

Turbine Training Center Mannheim, Germany.

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2018 till now

**Employer** : <u>EGYPTROL</u>, AC Boilers Subcontractor

**Project**: 3x670MW Supercritical South Helwan Power Plant

Job title : SCE/CCR Supercritical Boiler Commissioning & Operation Engineer

**Job Description**: • Start-up & shutdown of Supercritical Boiler for 3x670MW.

Attend Boiler commissioning activities such as:

Initial operation with heat run tests for all equipment.

- Boiler Chemical Cleaning Activities.

- Initial First Firing with NG, Solar and Mazout.

Steam Blowing Activities.

- Initial Turbine Rolling with Related Tests.

- Initial Synchronization.

Load Tests like Load Rejection, and House Load.

• Monitoring and careful follow-up of all systems for supercritical unit and its auxiliaries in normal and abnormal operations.

Making daily technical reports for all activities.

Dates : From Sep. 2014 till Sep. 2018

Employer : East Delta Electricity Production Company (EDEPC)Project : El Ain El Sokhna Supercritical Thermal Power Station

Job title : Shift Charge Engineer

Job Description : • Const

 Construction, commissioning and operation 2x650MW Supercritical Steam Thermal Power Station to be connected to the National Unified Power System (NUPS) through the New 500KV GIS Switchyard Facility.

- Attend and witness all equipment commissioning activities testing, lube oil and control oil flushing, initial operation and heat run tests for all HITACHI & DOOSAN & Intec auxiliaries 2x650MW steam unit (turbine & boiler & auxiliaries).
- Steam blow.
- Start-up and shut-down procedures for thermal power plant 2x650MW (Cold, Warm and Hot Start-up and normal or emergency shut-down).
- (Hitachi) Turbine & auxiliaries operation. And reporting the equipment condition during normal operation.
- (DOOSAN) Boiler & auxiliaries operation and reporting the equipment condition during normal operation.
- Testing and changing-over for all Mechanical equipment locally and from control.
- Making connection and disconnection for electrical circuits of 500KV,
   6.3KV and operation of electrical diesel-generators.
- Making daily technical reports about the unit's abilities & efficiencies.
- A good working knowledge of industrial safety requirements.
- Coordinate and supervise all operation activities between all contractors.
- Participate in issuing procedures systems first start-up and first operation.
- Perform work permits and equipment lock out tag out.
- Participate in issuing punish list items.
- Making daily technical reports about the unit activities.

Dates : From Nov. 2009 till Sep. 2014

**Employer** : East Delta Electricity Production Company (EDEPC)

**Project**: Attaka Power Plant

Job title : Operation Engineer

Job Description

 Operation Engineer, Start-up and Shutdown of boiler in DCS - Inspect the unit's and it's auxiliaries, electrical, mechanical, control and instrumentation equipment condition prior to start-up, during operation and after shutdown.

- Record all plant/auxiliaries operating data, including all alarms and protective devices being actuated and reports any deviation to the Shift Charge Engineer necessary action.
- Monitor operation of auxiliaries such as the plant switchgear and performs corresponding switching schedule as directed by the Shift Charge Engineer.
- Able to operate plant common auxiliaries such as auxiliary boiler, emergency diesel, dematerialized water plant, desalinated water plant and chlorination plant.
- Responsible for raising fault notification on equipments vital to the continuous operation of the plant.
- Perform other related duties as may be assigned by immediate superior from time to time.
- Member of emergency response team.
- Attend required and non-required training for regulatory compliance as well as personal development.
- Able to perform equipments testing with maintenance crew after defects rectification.
- Have to manage and coordinates the fuel unloading process with logistic workers and security team.
- Control Room (DCS) Process Engineer:
  - Start-up, shut down & safe operation for main boiler and its auxiliaries including: natural gas firing, mazout firing, start-up of aux, boiler, preparation of reboiler system, soot blowing system & chemical cleaning.
  - Start-up, shut-down & safe operation for main turbine (SIEMENS) and its auxiliaries including: lube & control oil system, seal oil & seal steams, condenser vacuum & evacuation systems generator cooling & filling systems, turbine extraction & drains.
  - Start-up, shut down & safe operation for the auxiliaries systems including: feed water system using variable speed turbine driven feed water pumps, condensate water system, closed cooling systems, service water system, circulating water system, compressed air system, Hydrogen plant.
  - Monitor the operating conditions of the power plant systems, record findings and readings.
  - Direct field operator to assist the Shift Supervisor in the safe operation of the facility.
  - Perform inspection of plant equipment, systems and facilities.
  - Responsible for operating plant controls to minimize or eliminate forced outages, curtailments and de-rates.
  - Support and preserve the best thermal performance of the unit.
  - Maintain the unit in compliance with all emissions limitations in accordance with the environmental permits and informs the shift Supervisor if a limit is exceeded.
  - Operate the unit in an efficient manner that will help with

maintaining the heat rate and availability.