#### 102567-ELE-1OS-E-2008

# **System Operation Engineer**

Holds a B. Sc. in Electrical Engineering and has over 9 years hands-on experience working in operation and start-up at Power Plants.

#### PERSONAL DATA

Nationality : Egyptian Birth Date : 19/08/1986

Gender : Male
Marital Status : Married

Residence : Currently Dubai

### **EDUCATION**

B. Sc. in Electrical Engineering, Mansoura University, 2008

#### LANGUAGES

Arabic : Native Language

English : Very Good

### **COMPUTER SKILLS**

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

: AutoCAD : Matlab

: Automatic Control, PLC, SCADA-DCS

## TRAINING COURSES AND CERTIFICATIONS

: ABB Arab Training Course:

- General course about the breaking equipments (fuses, Isolating Switches, Circuit Breakers, ...).
- General course about the Distribution Transformers.
- Design and installation of Distribution Boards (LV & MV).
- : Siemens Training Course:
  - Overview about the basics of Protections schematics of Power Plant electrical equipments.
  - The usage of digital protection device (Siprotec 4 devices) to protect every electrical equipment.
  - The wiring and connections needed for each protection device.
  - Installation and operation of the Siprotec 4 devices software (Digsi 4.82).
- : Shoubra El-Kheima Electrical Power Plant: Overview about the different mechanical and electrical systems used in the thermal power plant.

: Areva Training Course:

- Overview about the basics of Protections schematics of Generators in a Power Plant.
- The usage of digital protection device (Micom devices).
- The wiring and connections needed for each protection device.
- Installation and operation of the Micom devices software.
- : Trainings at New Talkha Combined Cycle Power Plant 750MW:
  - Components and Gas turbine operation course SIEMENS V94.3A -Teleperm XP control system.
  - Steam turbine operation 250MW using simulator system.
  - Gas turbine operation course SIEMENS V94.3A using simulator system.
  - CMI Energy + Skoda Praha HRSG on-job training.
  - The OV010 WIN Ovation Windows Operator Course (Emerson Process Management, at New Talkha Combined Cycle Power Plant 750MW).

#### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2018 till now

**Employer** : Dubai Electricity and Water Authority (DEWA)

Projects: G (1000MW) & M (2000MW) Stations

Job title : System Operation Engineer

Job Description : • Power Side:

- Taking care of Gas Turbine and steam turbine as per regular operation practice.
- Start-up and shutdown of gas turbines, steam turbine and HRSG boilers in different conditions.
- Operating plant parallel with gas availability and maintaining load as per Load Dispatch Centre requirement.
- Ensuring reporting of defects during normal running condition.
- Preparing, issue and cancelation of permits during regular operation and unit shutdowns.
- Following up mechanical isolations & ensuring safety measures during activities.
- Planning and effecting change-over schedules of various equipment and instruments to increase machine up time and equipment reliability.
- Identifying areas of obstruction / breakdowns and taking steps to rectify the equipment through application of troubleshooting tools.
- Preparation of daily & monthly generation reports.
- Water Side:
  - MSF Desalination Plant:
    - Start-up and shutdown of MSF Desalination plant in proper way.
    - Operating and monitoring MSF Desalination plant and its performance parameters.
    - Taking appropriate action to correct deviations from established standards to ensure continuity of operations and provision of water production in a safe and reliable manner according to water demands.
  - RO Plant:

- Record all R O plant data and maintained Plant Normalized data and lab analysis.
- Monitoring and supervision chemical preparations, dosages for the Pre- and Post treatment in addition to Plant chemical cleaning preservation.
- Monitoring and supervision the Sea Water Reverse Osmosis (SWRO) operation and maintenance.
- ❖ Coordinate between maintenance and operations to ensure that Preventive Maintenance (PM) of equipment which is performed according to schedule.
- Monitoring and supervision consumptions, stock inventory and chemical procurement.
- Monitoring and supervision process parameters such as pH, Total Dissolved Solids, Conductivities, Pressures, Oxidation Reduction Potential, and Temperature, Flow rates, Recovery and Product water stock levels.
- Prepare and review the membrane chemical cleaning schedules and its chemical preparations, monitoring and neutralization before disposal
- Assist or lead in the disinfection process if necessary based on microbiological results.
- Conduct comprehensive analysis of all treatment processes. Interpret laboratory data as needed.

Dates : From Jan. 2014 till Jan. 2018

**Employer** : Middle Delta Electricity Production Company

Project: New Talkha Combined Cycle Power Plant 750MW

Job title : Shift Charge Engineer

Job Description : •

- Operation of (2x250MW) SIEMENS V94.3A gas turbine Teleperm XP control system and associated auxiliary through DCS.
- Operation of two CMI Heat Recovery Steam Generators through OV010 WIN Ovation windows system.
- Operation of ALSTOM (250MW) DKYZZ3-2N41C steam turbine.
- Monitoring the operation of a power generating unit to ensure reliable and efficient power generation.
- Performing the unit start-ups and shutdowns per assigned targets.
- Supervisory duties require supervision, training, and directions to field operators in performing their jobs.
- Troubleshooting, 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.
- Operate through DCS based consoles in line with company's Standard Operating Procedures.

Dates: From Jun. 2013 till Jan. 2014

**Employer**: Middle Delta Electricity Production Company

Project: New Talkha Combined Cycle Power Plant 750MW

**Job Description**: Control Room operating & monitoring ALSTOM steam turbine through DCS.

Dates : From Feb. 2013 till Jun. 2013

**Employer** : Middle Delta Electricity Production Company

Project : New Talkha Combined Cycle Power Plant 750MW

Job Description : Control Room operating & monitoring two CMI HRSG (360 T/H) through

OV010 WIN Ovation windows system.

Dates : From Mar. 2012 till Feb. 2013

**Employer** : Middle Delta Electricity Production Company

Project : New Talkha Combined Cycle Power Plant 750MW

Job Description : Local operating & monitoring Alstom steam turbine and associated Auxiliary

systems such as:

Circulating water system.Condensate water system.

Vacuum system.

Gland steam system.

Lube Oil & Hydraulic system.

Water Box system.

**Dates** : From Sep. 2011 till Mar. 2012

**Employer**: Middle Delta Electricity Production Company

Project : New Talkha Combined Cycle Power Plant 750MW

Job Description : Local operating & monitoring two CMI HRSG (360 T/H), Auxiliary and Pipe

Rack, which including:LP, IP, HP Circuits.

HRSG Conservation with N2.

Hp Bypass & Ip Bypass.

Dearator Tank.

Blow-Down system.

HP/IP and LP FW pumps.

Preheater Recirculating pumps.

• MCC.

Dates : From Oct. 2010 till Sep. 2011

**Employer** : Middle Delta Electricity Production Company

Project : New Talkha Combined Cycle Power Plant 750MW

Job Description : Control Room operating & monitoring Two Gas turbines SIEMENS V94.3A

and associated Auxiliary systems using OM650.

Dates : From Jul. 2009 till Oct. 2010

**Employer**: Middle Delta Electricity Production Company

Project : New Talkha Combined Cycle Power Plant 750MW

Job Description : Local operating & monitoring Two Gas turbines SIEMENS V94.3A and

associated Auxiliary systems such as:

Air Intake System.

- Lube Oil System.
- Closed Cooling Water System.
- Hydraulic Oil System.
- Pneumatic System.
- Fuel Oil System.
- Fuel Gas System.
- Demi-Water System.
- Denox Water System.
- Diverter Damper System.
- Generator & SFC.
- HV & MV System.

#### Further experiences:

- Working on distribution of lighting in modern buildings project back in college as an additional project to satisfy my potential.
- Attending and observing the test schedules of almost all of the electrical equipments.
- Responsible for the inspection of some of the electrical equipments in the power plant.
- Monitoring the electrical equipments under test and confirm their safe operation.
- Ability to read the wiring and installation drawings of most of the electrical equipments of the power plant.
- Familiar with Most of mechanical & electrical equipments.