#### 102358-ELE-1OS-E-2005

# Start-up, Commissioning & Operation Consultant Engineer

Holds a B. Sc. in Industrial Electronics & Control Engineering and has about 17 years hands-on experience working in operation, commissioning and start-up at Power Plants.

### **PERSONAL DATA**

Nationality : Egyptian Birth Date : 14/01/1984

Gender : Male

Marital Status : Married

Residence : Cairo

### **EDUCATION**

B. Sc. in Industrial Electronics & Control Engineering, Menoufia University,

2005

#### LANGUAGES

Arabic : Native Language

English : Very Good

### **COMPUTER SKILLS**

: Windows, MS Office, Internet

### TRAINING COURSES AND CERTIFICATIONS

: Gas Turbine operation systems training at CEPC Power Plant Training Center (Apr. 2006).

: Gas Turbine Generator operation & maintenance training by TECHINT.

Gas Compressor training by TECHINT.

: Balance of Plant operation training MARK VIe DCS functional Design, GE.

: Operating Heat Recovery Steam Generators (HRSG) by NEM.

Operating Reheat Steam Turbine by ALSTOM.

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Oct. 2019 till now

**Employer** : PGESCo

Project: Cairo West Supercritical Project (1x650MW Doosan reheat STG & AC Boiler

supercritical boiler)

Job title : Start-up, Commissioning & Operation Consultant Engineer

Job Description

Flushing for all systems (Water & oil).

 Rotating equipments commissioning activities (including turbine driven feed water pumps).

• TOP review.

• Chemical cleaning process for Condensate, feed water & boiler.

Boiler Steam blowing activities.

Troubleshooting & analysis for any process variation.LOTO procedures for all mechanical & electrical systems.

• Pre-commissioning, commissioning & operation activities.

**Employer** : PGESCo

Project : Hayah Karima Project

Job title : Electrical Consultant Engineer

Job Description : • Coordinating between Housing Ministry represented by Construction

Authority (Project Owner), Ministry of Electricity & Contractors.
Pulling & testing new MV/LV cables in Egyptian villages.

Installing & testing new transformers, Kiosks & RMUs.

• Technical electrical engineering survey for MV/LV feeding various

buildings in the project.

• Installing new MV/LV networks if needed.

Checking all project paper work such IR (inspection request), MRR

(Material review request), ...etc.

Dates : From May 2019 till Oct. 2019

**Employer** : <u>EGYPTROL</u>, GE Energy Subcontractor

Project: West Assiut Combined Cycle Project (8x125MW GE frame 9E Gas Turbine

& 2x250MW GE D-series steam turbines)

Job title : Commissioning, Operation Lead

Job Description : • Supervise & support comm

Supervise & support commissioning technicians in the execution of their

activities.

Status reporting of commissioning progress as required.

Maintain the optimum performance of all operating units.

Follow up safe start-up for equipments & people.

Follow up LOTO isolation procedure, safety tags for equipments.

Steam blowing & HRSG chemical cleaning follow up.

Operation via Mark Vie operation control system.

Dates : From Nov. 2018 till Apr. 2019

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

**Project**: El-Shabab Project (Converting the existing simple cycle into combined cycle)

Job title : Warranty Engineer

Dates : From Jan. 2017 till May 2018

**Employer**: Power Generation Engineering and Service Company (PGESCo)

**Project**: El-Shabab Project

This new extension has four Ansaldo Caldaie HRSGs, Two Ansaldo Energia

Steam turbines (Air Cooled condensers).

Job title : Start-up, Commissioning & Operation Engineer

#### **Job Description**

- Chemical cleaning activities for HRSGs, condensate & feedwater systems.
- Plant steam blowing activities.
- Air-cooled condenser (ACC) hot-cleaning activities.
- AC Boiler 8 HRSGs Commissioning, start-up, performance, reliability tests and operation.
- Ansaldo Energia Steam turbines 2x250 commissioning, start-up, performance, reliability tests and operation.
- BOP commissioning, start-up and operation.
- Medium (6.6KV) and low (400 v) voltage switchgear.
- Follow up LOTO isolation procedure, safety tags for equipments.
- Achievement: We had reached the end of the project successfully & the plant was turned over to EDEPC (East Delta Electricity Production Company).

**Dates** : From Jun. 2013 till Dec. 2016

**Employer**: Power Generation Engineering and Service Company (PGESCo)

**Project**: Giza North Project (Combined Cycle 2250MW)

(Three modules, 6 GE Gas Turbine 9FA, 6 Heat Recovery Steam Generators (HRSG) manufactured by STF, 3 Steam Turbines manufactured

by Ansaldo)

Job title : Start-up, Commissioning & Operation Consultant Engineer

**Job Description** 

- First of all a good DCS operation abilities.
  - GE combustion gas turbine 6x250MW type 9FA commissioning, start-up, performance, reliability tests and operation.
  - STF six HRSGs commissioning, start-up, performance, reliability tests and operation.
  - Ansaldo steam turbines 3x250 commissioning, start-up, performance, reliability tests and operation.
  - BOP commissioning, start-up and operation.
  - Medium (6.3KV) and low (400 v) voltage switchgear.
  - 500/220KV GIS operation.
  - Attending of construction, start-up, commissioning, first energize for the transformers.
  - Safe operations for high, medium & low voltage switch gear & load centers.
  - Perform safety work permit system.
  - Operation of firefighting system.
  - Reading logic & check if it needs some modification according to operating requirements.
  - Helping owner in operation & abnormal situations as much as I can in order to keep the whole plant & employees working in safe & secure conditions.
  - Achievement: We had reached the of the project successfully & the plant was turned over to CEPC (Cairo Electricity Production Company).

Dates : From Mar. 2009 till Jun. 2013

**Employer** : Cairo Electricity Production Company (CEPC)

**Project**: North Cairo Power Station

Job title : Shift Charge Operation Engineer

#### **Job Description**

- Dealing with the unit trip conditions or HRSG trip conditions even the unit is in simple cycle mode or in combined cycle mode.
- Decide the isolation procedure for the gas turbine, HRSG, or the steam turbine in outage for inspection or overall maintenance.
- Writing reports about troubles and decide the isolation procedure for the equipment in case of maintenance during normal operation according to safety operation rules.
- Dealing with 220KV circuit breakers with the national dispatch center.

Dates : From Dec. 2005 till Mar. 2009

**Employer** : Cairo Electricity Production Company (CEPC)

Project : North Cairo Power Station

Job title : Shift Operator Engineer

**Job Description** 

- Erection, Commission, Start-up, Combustion Inspection and Operation Gas Turbine Engineer for GE 9FA.
- Start-up and operation for HRSGs.
- Commissioning & start-up and operation of steam turbines (cold start & warm start & hot start).
- Start-up and operation all auxiliary systems (service water, closed cooling water, Circulating water, compressed air...etc.).
- Check and operation for field equipment (valves, pumps ...etc.).
- Participated in steam blow test for the heat recovery steam generators and all related constructions (it's the most important test for HRSG before starting).
- Responsible for site acceptance tests (cleaning, commissioning and Function tests) for HRSGs & STEAM TURBINE and their associated auxiliaries.
- Perform the steam blow-out activities for HP steam & HRH & CRH steam
   & LP steam lines.
- Perform the chemical cleaning according to procedures for condensate system & feed water system.
- Attending of construction, start-up, commissioning, first energize for the transformers.
- Safe operations for high, medium & low voltage switchgear & load centers.
- Perform safety work permit system.
- Operation of firefighting system.
- Excellent knowledge of DCS systems.

#### Field of experience:

- Working in the field of MV / LV construction & commissioning electrical consulting services & engineering in Hayah Karima Project.
- About 17 years of experience in power plants, including Cairo North, Giza North, El-Shabab, West Assiut & Cairo West Projects.
- Familiar with GE, ALSTOM, Ansaldo Energia & Doosan turbines.
- Familiar with Nem, STF, AC Boiler & Doosan Heat recovery steam generators (Both Vertical & Horizontal types).
- Familiar with different types of Feed water pumps (Electrical & Turbine driven).
- PTW & LOTO procedures.
- Troubleshooting for all plant components.

- GIS (500KV/220KV) & Switch gear operation activities. Cable & transformers testing.