## 102534-MEC-18MSY-E-2002

# Senior Mechanical Commissioning Engineer

Holds a B. Sc. in Mechanical Engineering and has over 17 years hands-on experience working mainly in maintenance, commissioning and start-up.

## **PERSONAL DATA**

Nationality : Egyptian Birth Date : 11/05/1976

Gender : Male
Marital Status : Married

Residence : Currently Oman

### **EDUCATION**

B. Sc. in Mechanical Engineering, Alexandria University, 2002

#### LANGUAGES

Arabic : Native Language

English : Fluent

## **COMPUTER SKILLS**

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

: Engineering Equation Solver

# TRAINING COURSES AND CERTIFICATIONS

- : ALSTOM HRSG 160 hours operation training program, Surabaya Indonesia (23 days).
- : ALSPA p320 (DCS) distributed control systems operator on-shore training, Nubaria (1 month).
- Basic operation and maintenance on GT (V94.3A) by SIEMENS Company, Nubaria (1 month).
- Basic operation and maintenance on combined cycle by WDEPC, Damanhour.
- : Attended all Jebel Ali Power and Desalination Station "M" Training, which has been organized by DOOSAN Heavy Industries & Constructions, DUBAI UAE (4 months).
- : Attended all Jebel Ali Power and Desalination Station "M" Training, which has been organized by FISIA Co. for MSF Desalination, DUBAI UAE (2 months).

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2021 till now

**Employer** : ACTS (Alghanim, Cobra, Tedagua, Sojitz) – OMAN

Project: Supply, Erection, Operation and Maintenance, SABIYA CCGT-3 Power

Project 1000MW

Job title : EPC - Mechanical Commissioning Senior Engineer

Dates : From Jan. 2020 till Apr. 2021

Employer : AGI (Al-Ghanim International General Trading and Contracting Company) -

Kuwait

Project: Supply, Erection, Operation and Maintenance, SABIYA CCGT-3 Power

Project 1000MW

Job title : EPC - Mechanical Commissioning Senior Engineer

Job Description : • 2 HRSG BHI:

 Lead the commissioning team for executing cold and hot commissioning as below.

 Prepare /review all commissioning documents, commissioning procedure, ITPL (Inspection test plan) and drawing (P&ID, GAD, ISO).

- Sites walk down and prepare related punch points before starting all activities (hydro test, chemical cleaning, steam blow, restoration after Steam blow out, bypass operation and steam admission.
- Involved in HRSG all valves and appetites function test, HRSG trip test, safety valves test.
- Involved in startup and final tuning for HRSG during bypass operation and steam admission.
- Prepare final commissioning document.
- WSC: Involved in executing cold and hot commissioning for water steam cycle including bypass station following ITPL (Inspection test plan) and OEM recommendation.
- Steam turbine:
  - Follow up with siemens team for executing cold and hot commissioning for SIEMENS steam turbine and steam turbine auxiliary system, in all commissioning phases as per the prepared ITPL, and OEM recommendation.
  - Involved in all plant PGT (performance grantee test).
- BOP systems: Lead commissioning team to executing precommissioning and commissioning for plant BOP systems (DW, SW, IA compressors, firefighting, Main cooling & cooling tower system, water stream cycle......etc.) as per commissioning procedure and prepared ITPL.
- Preservation: Lead commissioning team during over plant long team preservation due to COVID 19 pandemic for STG, GENERATOR, HRSG, PIPING & VALVES ROTATING EQUPEMENTS following the preservation procedure recommended by OEM.

Dates : From Jul. 2018 till Dec. 2019

Employer : AGI (Al-Ghanim International General Trading and Contracting Company) -

Kuwait

Project : Supply, Erection, Operation and Maintenance for the Conversion of the first

stage Sabiya Gas Turbines to Combined Cycle Plant CCGT-1, 250MW and

CCGT-3, 316MW

Job title : EPC - Mechanical Commissioning Senior Engineer

Job Description : • GE (HRSG & Steam Turbine):

 Follow up with GE team for executing cold and hot commissioning for GE steam turbine and steam turbine auxiliary system, in all commissioning phases as per the prepared ITPL, and OEM recommendation.

- Follow up with GE team for executing cold and hot commissioning for 2 GE HRSG s, in all commissioning phases as per the prepared ITPL, and OEM recommendation.
- Follow up the PGT (performance grantee test) for all plant performance.
- BOP systems: Lead commissioning team to executing precommissioning and commissioning for plant BOP systems (DW, SW, IA compressors, firefighting, Main cooling & cooling tower system, water stream cycle......etc.) as per commissioning procedure and prepared ITPL.

Dates : From Apr. 2012 till Jul. 2018

**Employer**: MDEPC (Middle Delta Electricity Production Company)

**Project**: Nubaria Combined Cycle Power Plant 2250MW

(consists of 4 gas turbines Siemens V94.3A2, two Mitsubishi TC2F-35.4",

2 GE gas turbines GE MS9001FA and one ALSTOM steam turbine)

Job title : Senior Mechanical Engineer (Maintenance Dept.)

**Job Description**: • SIEMENS GAS TURBINES (Model: SGT5-4000F):

Lead the customer maintenance team for executing the following Outages:

- Scheduled minor inspection (8,000 EOH) of 04 Siemens Gas Turbines units.
- Scheduled major inspection (50,000 EOH) of 04 units Siemens gas turbine.
- Unscheduled overhaul Maintenance of Siemens GT due to the compressor surge incident 2 times.
- Scheduled Hot Gas Path Inspection (75,000 EOH) of 04 Siemens gas turbines.
- Scheduled Lifetime Inspection (100,000 EOH) of 04 Siemens gas
- Degradation thermal performance test after all Siemens overhaul outage.
- Gas turbine GE (9 FA): Involved in combustion inspections for gas turbine GE (9 FA) 2 times.
- MITSUBISHI STEAM TURBINE (Model: TC2F-35.4):
   Lead the customer maintenance team for executing the following Outages:
  - Unscheduled overhaul maintenance of steam turbine due to vacuum lost.
  - Scheduled Overhaul Maintenance of 02 Mitsubishi steam Turbines and their auxiliaries.
  - Commissioning and the required tests including the adding/removing of balance Weight before commercial operation.

- All BOP equipment's routine maintenance.
- GE GAS TURBINE (Model: frame LM 6000): Lead the construction and pre-commissioning (with Egyptian Power Service Company) of 02 GE Gas Turbines during Egyptian Government Ministry of Electricity Fast track project in Port Said City – EGYPT (03 months).
- DEC (Dongfang Electric Corporation Limited (02 months):
  - Working with DSA company (Doosan Saudi Arabia) Rabigh (ROMCO) thermal power plant to execute the overhaul maintenance outage for 02 steam turbine generator model DFEM 660MW/60Hz (hydrogen cooling).
  - Lead the mechanical maintenance team for executing all mechanical maintenance activities of 02 generators during the outage and their related mechanical tests.

#### OTHERS:

- Responsible for executing all maintenance routines in time for Gas turbine auxiliaries (lube/hydraulic oil systems, cooling and seal air systems, pneumatic system, gas and liquid fuel skids....) and steam turbine auxiliaries (lube/hydraulic oil systems, sealing & gland steam, condensate and vacuum systems...).
- Online Siemens GPC (global spare part catalog).
- Read discuss the (LTMC1 & LTMC2) between my company as a customer and Siemens Company as contractor and rise reports to head management for final approval.

**Dates** From Apr. 2008 till Mar. 2012

**Employer** DEWA (Dubai Electricity and Water Authority) - UAE

**Project** Jebel Ali Power and Desalination Station 'M' 2000MW & 140 MIGD – UAE Jebel Ali Power and Desalination Station 'M' is a new project started from year 2008 and it has the capacity of 2,000MW total gross power output &

140 MIGD water productions and calcified as below:

- GT SIEMENS (SGT5-4000F) 6x250MW with evaporative cooler.
- STG ALSTOM (HDC200/2AS-NE33AU) 2x221MW, with adaptive stage.
- HRSG (DOOSAN) with supplementary NG firing.
- MSF (FISIA) desalination units: 8 x 17.5 MIGD, @ sea water temperature 30 °C and 105 °C TBT.
- Aux. Boiler (STF) 2 x Steam flow 370 T/Hr. @ 19 bara & 235 °C.

Job title Operation & Commissioning Engineer

- Follow up pre-commissioning and commissioning for Siemens GT and ST by Alstom, Germany, Combine Cycle Power Plant capacity of 2000MW (DEWA) under Doosan Co. Jebel Ali, Dubai.
- Follow up the steam blowing and Commissioning of 06 HRSG with supplementary firing.
- Control board operation of Gas Turbines, Steam Turbines, Desalination Plants (MSF FISIA Company), Water Treatment Plant, Emergency DG, Natural Gas Pressure Reducing Station, Sea Water Pumps House, Chlorination Plant & Demineralization...
- Making Work Requests and issue Safety Permits through Computerized Maintenance Management Systems for corrective, preventive and annual maintenance programs.
- Make the daily reports of all activities and the generation calculation reports and fuel gas or DFO consumption, distillate water production...

# **Job Description**

Dates : From May 2004 till Apr. 2008

**Employer**: MDEPC (Middle Delta Electricity Production Company)

**Project**: Nubaria Combined Cycle Power Plant (2250MW)

Job title : Mechanical Maintenance Engineer

Job Description : • Follow up the construction and commissioning phases for gas turbine

and steam turbine.

 Involved in minor inspection to 04 Siemens gas turbines (model SGT5-4000F).

- Involved in the Programed hot gas path inspection outage (25,000 EOH) of 04 units Siemens gas turbine (model SGT5-4000F).
- Involved in warranty major inspection for 01 steam turbine (model: TC2F-35.4, 250 MW) with Mitsubishi Company.
- Lead the maintenance team for executing all maintenance routines in time for plant BOP equipment's.

#### Field of experience:

#### • MAINTENANCE (10 years):

- GAS TURBINE: Involved in executing Gas turbine SIEMENS SGT4000F/GE 9FA and gas turbine auxiliary's system, preventive, predictive, scheduled, and non-scheduled maintenance doing the troubleshooting, failure analysis, maintenance procedure including overhaul outages (8000EOH, 25000EOH, 50000EOH & 100,000EOH).
- STEAM TURBINE: Involved in executing steam turbine MITSUBISHI/ALSTOM/GE and steam turbine auxiliary's system, preventive, predictive, scheduled, and non-scheduled maintenance doing the troubleshooting, failure analysis, maintenance procedure including the overhaul outage.
- GENERATOR: Involved in executing overhaul outage for steam turbine generator MITSUBISHI Egypt and DFEM 660MW/60Hz ROMCO Saudi Arabia.
- BOP: Involved in executing preventive, predictive, scheduled, and non-scheduled maintenance doing the troubleshooting, failure analysis, maintenance procedure for (pumps, compressors, fans, heat exchanger, heaters, piping and valves).

#### COMMISSIONING (7 years):

- Follow up cold and hot commissioning for Gas turbine SIEMENS and gas turbine auxiliary system, as per ITPL (Inspection test plan) and OEM recommendation.
- Involved in cold and hot commissioning for steam turbine GE/SIEMENS and all related auxiliary system as per ITPL and OEM recommendation.
- Involved in executing cold and hot commissioning for HRSG ALSTOM/GE/BHI as per ITPL and OEM recommendation.
- Involved in executing cold and hot commissioning for plant BOP asper ITP and OEM recommendation.

#### INSPECTION:

- Review Inspection Check list for mechanical items and dimensions Check report (Turbines, Pumps, Valves, ...etc.).
- Review QC. Plan.
- Review manufactures Data Book for (Gas Turbines & steam turbines).
- Review Final Documentation of Test Package for turbines.

- Punch List Preparation, Test Pack Review & Final Approval.
- Conduct receiving inspection of all materials, Inspection is based on Project specification and relevant Standards such as ASTM, DIN.
- Review and verifies all the relevant materials Certification to assure its compliance is based on Project specification and applicable Standards.