# 101288-MEC-148CMSY-E-2001

# Commissioning Engineer

Holds a B. Sc. in Mechanical Engineering and has over 19 years hands-on experience working in construction, maintenance and commissioning at Power Plants and other projects.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 05/01/1973

Gender : Male

Residence : Alexandria

### **EDUCATION**

B. Sc. in Mechanical Engineering, Alexandria University, 2001

#### LANGUAGES

Arabic : Native Language

English : Very Good

# **COMPUTER SKILLS**

: Windows, MS Office, Internet

: MS Project

# TRAINING COURSES AND CERTIFICATIONS

One month in Ansaldo Energia Company in gas & steam turbine (Genoa, Italy) (2008).

: Training course on ASME B31.1 (power piping design and fabrication), approved from AUC and SA-International.

: One month (on-shore training) from NEM Company in erection and maintenance.

Non-destructive test (VT, RT, PT, MT) level 2.

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Mar. 2018 till May 2019

**Employer** : Orascom

**Project**: Al-Burullus Combined Cycle 4800MW

Job title : Commissioning Engineer

Job Description : • Manage Start-up Staff for pre-commissioning and commissioning

Activities for BOP systems.

- Manage Operation Staff and LOTO Staff for operating BOP systems.
- Review Contractors Start-up Procedures to assure compliance with the Contracts technical specification and standards.
- Coordinate with the owner, Contractors and Operation Personals to perform start up activities.
- Follow start-up/operation activities and instruct operation staff by daily program.
- Check and review the Erection Completion Certificates (ECC) that are handed over from Construction to Commissioning and issue LOPs.
- Check and review turn over and acceptance certificates (TOAC) that are hand over from OC to the owner and identify the non-compliances.
- Follow up steam below and chemical cleaning of boiler in all phases.

**Dates** From Jan. 2016 till Mar. 2017

**Employer** GE

**Project** QATAR LIQUEFIED GAS COMPANY LTD QATAR GAS, Egypt and Iraq Job title

Mechanical Commissioning Engineer (Lead Mechanical Engineer)

(MS9001E and 9F MAJOR INSPECTION)

Remove Inlet Plenum, Elbow & Duct Components. **Job Description** 

Remove ventilation Ducts.

- Disassembly Load coupling.
- Remove Roof & Enclosure Panels.
- Remove Turbine Compartment Piping.
- Perform Initial Compressor and Turbine Rotor Positioning Check.
- Remove Fuel Nozzles, Combustion chambers covers.
- Remove Crossfire Tubes, Liners and Flow Sleeves & Combustion casings and inspection.
- Remove Wrapper casing.
- Remove Exhaust Frame Casing.
- Remove Turbine Casing.
- Remove Transition Pieces.
- Measure 1st Stage Nozzle Concentricity.
- Remove 1st Stage Nozzle.
- Remove 1st stage nozzle support ring.
- Remove Compressor Discharge Casing & Fwd. Compressor Casing.
- Remove Inner Barrel.
- Remove Inlet Casing.
- Perform Thrust Check.
- Verify Opening Clearances.
- Remove Bearing cap.
- Perform 1st Stage Nozzle Ellipticity Checks.
- Remove 2nd & 3rd Stage Nozzle Segments.
- Removed install an 1st, 2nd & 3rd stages Shroud Segments as Per CBMO.
- Removed and install 1st, 2nd & 3rd Stage Buckets as Per CBMO.
- Clean & Visually Inspect Inlet Guide Vanes.
- Clean & Inspect Compressor Vanes.
- Clean & Visually Inspect Rotor & Bearings.
- Visually Inspect and install Fuel Nozzles & End Covers.
- Install 2nd & 3rd Stage Nozzle Segments & diaphragm.

- Install 2nd & 3rd Stage Nozzle Segments and Install Inner Barrel.
- Install Rotor & bearings.
- Install Compressor Discharge Casing & fwd. Compressor Casings.
- Perform 1st Stage Nozzle Concentricity Checks.
- Install Inlet Casing.
- Install Exhaust Frame Casing.
- Install Transition Pieces.
- Install Turbine Casing.
- Install Wrapper casing.
- Installation of Combustion Casings, Flow Sleeves, Liners, Crossfire Tubes.
- Install Combustion covers & Fuel Nozzles.
- Install combustion system instrumentation.
- Install Inlet Plenum, Elbow & Duct Components.
- Install exhaust duct & plenum.
- Perform Final Compressor and Turbine Rotor positioning Check.
- Install Turbine Compartment Piping.
- Alignment Checks and assembly of Load Coupling.

Dates : From Aug. 2015 till Jan. 2016

**Employer** : Unaoil Group (Iraq)

Project : 4x26MW (GE-frame 5) oil and gas (South Oil Company)

Job title : Mechanical Construction & Commissioning Superintendent

**Job Description** 

- Responsible for all construction, commissioning and warranty activities, whether Static or rotating up to pre-commissioning within Schedule, Budget and quality.
- Turbine and generator anchor Bolt and soleplate installation, leveling, coordination and centering both (GT & Gen).
- Carry out pre-alignment.
- On Base Enclosure Completion.
- Main support structure Installation.
- Filter house and inlet Duct installation.
- Exhaust Duct Installation and stack.
- GT. Skids Installation and positioning.
- Ventilation system installation.
- Perform lube oil flushing and carry out the final alignment.
- Supervise all Commissioning activities and startup troubleshooting.
- Covering warranty issue up to handover to the client.
- Carry on CI and Hot gas pass during warranty period.

**Dates** : From Nov. 2012 till Jul. 2014

**Employer** : MEGA

Projects : El-Shabab Simple Cycle Power Station & West Damietta Simple Cycle

1000MW (GE-Frame 9E)

Job title : Commissioning Manager

Job Description : Follow up all mechanical activities for Dry low Nox (DLN1) Retrofit frame

9EA:

 Inventory of all DLN material for all units with Mr. John Brown (GE Site Leader). Installing new combustion system.

Modify Purge air system.

- Modify atomizing air system.
- Modify cooling and sealing air system.
- Modify water injection system.
- Modify gas fuel system.
- Modify water cooling system.
- Carry out all commissioning required up to start-up.
- Complete C.I and hot gas path inspection.
- Bearing No.2 and No.4 inspection and repair.

**Dates** : From Dec. 2010 till Nov. 2012

**Employer**: Kharafi National

Project : El-Shabab Power Station

(8x125MW GE frame 9E Simple Cycle)

Job title : Project Commissioning Engineer

Job Description

- Responsible for all commissioning and warranty activities on GE gas turbine Frame 9E, starting from the Civil work till start-up including warranty.
- Was involved heavily with the installation of 8 gas turbine and generators at the El-Shabab project in Egypt. This project gained worldwide recognition because we installed these gas turbines and put them on the electrical grid in less than 7 months.
- After the installation I have been in charge of all warranty work at the EI-Shabab Power Plant including any gas turbine or generator work.
- Manage Start-up Team for pre-commissioning and commissioning Activities for all systems in El-Shabab Plant such as systems walk down and witnessing hydrostatic tests, flushing, alignment, solo test and load test for rotating machines.
- Check and review the Construction Completion Certificates (CCC) that are handed over from contractors to owner and issue comments.
- Review Contractors Start-up Procedures to assure compliance with the Contracts technical specification and standards.
- Coordinate with the owner, Contractors and Operating Personals to perform start-up activities.
- Support the issue to generate punch list items and to close them or documenting deficiencies.
- Attend the Daily Construction Coordination meetings and start-up coordination meeting.
- Manage start-up/operation activities and instruct operation staff / Start-up staff by daily program.
- Covering warranty issues after handing over to client.

Dates : From May 2008 till Nov. 2010

**Employer** : NEM Co.

Project : Sidi Krir Power Plant (750MW) Combined Cycle

(2 phases, each one is 2x250MW GE Gas Turbines + 250MW Steam

Turbine Ansaldo & HRSG, supplied and constructed by NEM)

Job title : Lead Mechanical Construction Engineer

#### Job Description

- Responsible for all mechanical site activities.
- Monitor and assign work to Site Engineers in accordance with Company's policies and procedures and limits of authority.
- Follow up the completion of all systems punch list with the contractors.
- Follow up all daily and weekly of construction meeting.
- Ensure safety standards and procedures are implemented and followed in accordance with contract requirements.
- Erection of non-pressure parts:
  - Steel structure (Goalposts, Staircase tower, Wall case and Stack).
  - Erection of bumpers, attic plate basement plate.
  - Adjusting and erection of pipe support (variable and rigid supports).
  - Erection of expansion joints.
  - Erection the side wall baffles guide plate.
- Erection of pressure parts:
  - Erection of harps (alloy steel P22, P91 and carbon steel).
  - Erection of HP, LP and IB drum.
  - Erection of blow down system.
  - Steam blow and erection of pumps.
  - Erection large and small bore piping (carbon steel, alloy steel).
  - Following up welding procedures in accordance with the requirements of ASME code:
    - Welding procedure specifications (WPS).
    - Procedure qualification records (PQR).
    - Welding inspection procedures.
    - Weld filler material control procedures.
    - Post welding heat treatment procedures (PWHT) procedures.
    - Non-destructive examination (NDE) procedures.
    - Positive material identification (PMI) procedures.
  - Following up Hydrostatic test as per ASME code (B31.1).

Dates : From Sep. 2007 till Apr. 2008

**Project** : Sidi Krir Power Plant

Job title : Site Maintenance Engineer (Boiler Dept.)

**Job Description** 

- Follow up maintenance activities including boilers and Desalination plant.
- Maintenance of:
  - Maintenance of Rotodynamic pumps, Centrifugal pumps, Propeller pumps.
  - Maintenance of + VE displacement pumps Screw pumps single and multiple – rotor types Diaphragm pumps (dosing pumps) Pistons pumps.
  - Alignment of pumps (using dial indicator method or filler method).
  - Overall maintenance & preventive maintenance.
  - Maintenance of Oil burners, natural gas burners, pneumatic dampers.
  - Inspection of furnace tubes and natural gas flexible joint and replace it.
  - Inspection of water tube and follow up all the required welding activities (SMAW, GTAW).
  - Forced draft fan, gas re-circulating fan.
- Maintenance of boilers auxiliaries:
  - Maintenance of attemperator valves of boilers.
  - Adjust and tuning the burners of natural gas.

Soot blowers.

- Maintenance of fans (FDF, GRF).
- Maintenance of valves (globe, gate, Butterfly and control valves).
- Maintenance of hydraulic pistons.

Maintenance and replacement of Gas Preheater and Steam Coil Heater.

**Dates** From Aug. 2005 till Sep. 2007 **Employer** Metito Water Treatment Co.

**Project** Sharm El-Sheikh

Job title Site Commissioning Engineer

**Job Description** operation procedures.

• Supervise and instruct my staff and insuring that the operations in an optimal safety.

Perform the Start-up / shut down activities as per the plant approved

- Carry out safe isolation of equipment for planned and emergency maintenance activities.
- Maintaining the stability of the plant operation in an optimal efficiency conditions.
- Supervising and instructing to the operators during the systems operation.

**Dates** From Oct. 2002 till Aug. 2005

**Project** Sidi Krir Power Plant

Job title Site Maintenance Engineer (Boiler Dept.)

Follow up maintenance activities including boilers and Desalination plant. **Job Description** :

Maintenance of:

- Maintenance of Rotodynamic pumps, Centrifugal pumps, Propeller
- Maintenance of + VE displacement pumps Screw pumps single and multiple - rotor types Diaphragm pumps (dosing pumps) Pistons
- Alignment of pumps (using dial indicator method or filler method).
- Overall maintenance & preventive maintenance.
- Maintenance of Oil burners, natural gas burners, pneumatic dampers.
- Inspection of furnace tubes and natural gas flexible joint and replace it.
- Inspection of water tube and follow up all the required welding activities (SMAW, GTAW).
- Forced draft fan, gas re-circulating fan.
- Maintenance of boilers auxiliaries:
  - Maintenance of attemperator valves of boilers.
  - Adjust and tuning the burners of natural gas.
  - Soot blowers.
  - Maintenance of fans (FDF, GRF).
  - Maintenance of valves (globe, gate, Butterfly and control valves).
  - Maintenance of hydraulic pistons.
  - Maintenance and replacement of Gas Preheater and Steam Coil Heater.