#### 100064-MEC-14CMOSY-E-2016

# Commissioning, Operation & Start-up Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 3 years hands-on experience working in maintenance, operation, commissioning and start-up.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 05/09/1993

Gender : Male

Marital Status : Single

Residence : Giza, Cairo

### **EDUCATION**

B. Sc. in Mechanical Power Engineering, Banha University, 2016

#### LANGUAGES

Arabic : Native Language

English : Excellent

# **COMPUTER SKILLS**

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

: AutoCAD 2D & 3D

# TRAINING COURSES AND CERTIFICATIONS

: Solid Works Design Applications (Basic & Advanced).

: Basic programmable logic controller "PLC".

: General Review of Fundamental Engineering (FE).

: Mechanical Hydro-Test & Maintenance with Metito Company "for Water treatment" at Damietta Power Plant (from Jul. till Oct. 2015).

: Mechanical Maintenance & Operation in Boiler Abu Qir Thermal Power Plant Project (Steam Generators & Auxiliaries 2x650MW) at Ansaldo Caldia Company (from Jul. till Oct. 2014).

: Mechanical Maintenance & Commissioning (6th October 600MW Simple Cycle Power Project) (from Jul. till Oct. 2013).

: Boiler Commissioning & Start-up at Abu Qir Thermal Power Plant Project (Steam Generators & Auxiliaries 2x650MW) (from Jul. till Oct. 2012).

: Auto Maintenance "Opel Cars" at Auto Maintenance Center "Hossam Opel Center" (from Jul. till Oct. 2011).

: Diesel generators maintenance (from Jul. till Oct. 2010).

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Mar. 2019 till now

**Employer**: EGYPTROL, Al Toukhi Subcontractor

Project: Conversation of Hail-2 Simple Cycle to Combined Cycle Power Plant

(450MW) Project in Hail, Saudi Arabia. The facility is a 4 x 4 x 1 combined

cycle configuration consisting of:

• 4 SIEMENS gas turbines with control systems T3000.

• 4 AMEC FOSTER WHEELER HRSG two pressure with control systems

T3000.

One SIEMENS SST-800 Steam Turbine 165MW with control systems

T3000.

• Direct Air Cooled Condenser.

Job title : Commissioning, Operation & Start-up Engineer

Job Description : • Solve the technical problems to Start the Reliability Test.

• Carry out Reliability Test Running (RTR).

• Carry out Performance Test (PT).

Trouble shooting supporting and following the maintenance activities as

per vendor recommendation.

Dates : From Dec. 2018 till Feb. 2019
Employer : GS Engineering and Construction
Project : ERC (Mostorod Refinery Project)

The refinery's designed capacity is 4.2M.Tons/Year; equivalent to 140000 bbl/day. The plant will decrease the country's need for diesel by around 50% and imported gasoline by 20% when it starts operations. It will further cover 14% of Egypt's annual liquid oil products' demands, with a production capacity reaching 4.2 million tons of liquid products, in addition to 600,000 tons of sulfur and coke each year. Refinery Units: VDU, Reformer, Amine Treatment & Regeneration, Naphtha Hydro-treating, Hydrocracker, CCR, Delayed Coker, Distillate Hydro-treating, De-Ethanizer, Hydrogen Production, Sour Water Stripping, Sulphur Recovery and Tail Gas Treating.

Job title : Commissioning, Operation & Start-up Engineer (Utility Area)

Job Description

 Carry out walk down for boilers, nitrogen area, compressed gas unit, waste water treatment unit raw and demi units, sump systems and tankage area.

Checking progress and matches with plans received.

Closing punch items for different packages.

Provide commissioning expertise in the development of project

commissioning start- sequences and schedules.

• Review of and as required preparation of detail plans, project procedures, preparation of pre-commissioning, commissioning and start-

up plans and procedures.

Dates: From Mar. 2018 till Nov. 2018

**Employer** : **EGYPTROL**, Al Toukhi Subcontractor

Project: Conversation of Hail-2 Simple Cycle to Combined Cycle Power Plant

(450MW) Project in Hail, Saudi Arabia. The facility is a 4 x 4 x 1 combined

cycle configuration consisting of:

- 4 SIEMENS gas turbines with control systems T3000.
- 4 AMEC FOSTER WHEELER HRSG two pressure with control systems T3000.
- One SIEMENS SST-800 Steam Turbine 165MW with control systems T3000.
- Direct Air Cooled Condenser.

Job title

Job Description

Commissioning, Operation & Start-up Engineer

- Carry out walk down with all disciplines officially and make punch items to release commissioning to start.
- Execute commissioning activities within budget and schedule.
- Ensure a high standard of safety is achieved, and Environmental and Quality Assurance procedures are followed.
- Participate in technical meetings and handle discussions with client engineers.
- Provide commissioning expertise in the development of project commissioning start-up sequences and schedules.
- Review of and as required preparation of detail plans, project procedures, preparation of pre-commissioning, commissioning and startup plans and procedures.
- Support for the development of Operations Readiness plans.
- Participate in start-up sequence workshops with both client and EPC contractors.
- Systemization including mark up of P&IDs.
- Development of completions work packs and plans.
- Provide input to periodic project report.
- Field troubleshooting, including analysis of problems / recommendation & implementation of appropriate solutions, meeting with customers in plant or at customer's site to resolve satisfactorily.
- Coordinate and supervise the work of all mechanical activities and operations.
- Receive / action Request(s) for Information (RFIs) that apply to mechanical works. RFIs requiring design feedback will be directed to the Designer for response. Review responses for adequacy.
- Review Contractor's Mechanical change order proposals.
- Solo test, Heat run tests, Function Tests for all Equipment's, Air blowing, Hydraulic tests, Fuel oil flushing, Lube oil flushing, Water system flushing, Turning Gear Operation, Chemical cleaning and Steam blowing (continues or pulsations), Bypass operation, Steam admission and warm up speed, Automatic Turbine Tester (ATT), Dummy synchronizing, Runback test, Partial load rejection, Full load rejection, Cold start up, Warm start-up, Hot start-up, Preservation Boilers & HRSG and steam lines.
- Start-up/shut down sequence checking as per manufacture instructions.
- Trouble shooting supporting and following the maintenance activities as per vendor recommendation.
- Direct and supervise the mechanical maintenance team while implementing preventive, corrective maintenance and work orders taking into consideration the risk assessment, HSE requirement and the company procedures.
- Develop, manage and execute all commissioning and related activities in conformance with the contract, company policies and procedures.
- Follow up preventive maintenance, predictive maintenance and

corrective maintenance, in line with the operation integrity engineering plans.

 Prepare and plan in details all planned maintenance, major services and maintenance jobs during normal operation and planned shutdowns by ensuring maximum support to sustainable operation.

**Dates** : From Aug. 2017 till Feb. 2018

**Employer** : UEEPC / Orascom

**Project**: West Assiut Power Plant 1500MW

(consists of Eight CTGs 8x125MW, GE (PG 9171E) dual fuel fired GAS TURBINE GENERATOR EQUIPMENT PACKAGE WITH ALL REQUIRED BALANCE OF PLANT SYSTEMS ARE combined with Eight Doosan

HRSGs and Two Ansaldo Energia steam turbines 250MW)

Job title : Commissioning, Operation & Start-up Engineer

Dates : From Jul. 2016 till Feb. 2017Employer : Ansaldo Energia Company

**Project**: 6th October Simple Cycle Power Project

Job title : Field Service Engineer

**Job Description** 

- Was working as a Mechanical Engineer with Ansaldo Energia Company in Long Outage for overhaul & warranty inspection for 6th October Simple Cycle Power Project the Gas Turbine Control Monitoring and Protection System (GTCMPS) for the four Ansaldo Gas Turbines AE94.2 supplied and the control system of BOP common part systems, for the project 6th OCTOBER 600MW 4x150MW - Simple Cycle Power Plant (8 GTs, 4 Hot Gas Path (HGP) overhaul & 4 Warranty inspection in Second phase of combined cycle power plant).
- Supervise and advise the Gas Turbine mechanical works during outage.
- Producing QMS documentation as required, review outage reports, and work toge to coordinate outage deliverables, etc.
- Be link between Field Service, Project Management and Customer Support Engineering department.
- Manage the performance of the works as specified on the provided (by PM team) work scope.
- Supervision and management of the mechanical works performed by subcontractors during outages, ensuring that the works are done.
- To review Mechanical work scope and provide feedback as well as any possible recommendations in order to plan accordingly.
- To review the mechanical scope of the schedule.
- To plan resources needed.
- Interpret drawings, field service procedures and technical documents to explain in detail the findings and proposed actions.
- To check the proper recording of data sheets, submit dirty data sheet to our internal departments and the customer, transfer dirty data to clean sheet for the report.
- Write outage report including.
- To propose and implement possible improvement opportunities.
- To develop, review, revise QMS documents such as procedures, instructive, data sheets, etc. and related technical information.

#### Field of experience:

- Monitor operation condition for the unit during normal operation.
- Lock-out & Tag-out.
- Following proceeding for unit load increasing and decreasing.
- Worked in overhauling & calibration of safety relief valves, general valves (Gate valve, globe valve, ball valve, check valve etc.).
- Filters, strainers and pipeline plant maintenance.
- Involved in shutdown maintenance of heat exchangers, Vessels, Towers, Reactors, Tanks and Spading & de-spading activities.
- Preventive, Predictive, Break down & Shutdown Maintenance of Power Generation Units includes Gas Turbine, Compressor, Generator and related Gear units.
- Trouble shooting of Gas Turbine, Compressor and allied accessories.
- Preventive, Predictive, Breakdown Maintenance of Mechanical Rotary Equipment such as Pumps (Horizontal / Vertical Pumps, Centrifugal / Reciprocating Pumps, Plunger Pumps, Screw Pumps), Compressors (Reciprocating / Centrifugal), Ventilation Fans, Blowers & Crude Tank Mixers.
- Preventive breakdown maintenance and over handling of static equipment's such as Heat exchangers, towers, vessels and rotary equipment's Diesel Engines, centrifugal compressor, Reciprocating compressor, gear box, pumps, fans & blowers and valve servicing.
- Knowledge of installation, commissioning of machines, leveling alignments & balancing of machines.
- Maintenance and overhauling of rotating equipments such as compressor, gear box, pumps fans & blowers and static Equipments maintenance, Crane maintenance.
- Erection, Pre-Commissioning, Maintenance of Pumps, Compressors, Gas & Steam Turbines, Hydraulic Cranes, Pipe Lines, Process Plant Equipment, etc.
- Hydraulic pump (Gear pump) disassembly, assembly, alignments, test run.
- Hydraulic valves refurbishment installation & its hydraulic testing.