101600-MEC-1OSY-E-2005

Steam Turbine Commissioning Operation Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 13 years hands-on experience working in operation, commissioning & start-up at several Combined Cycle Power Plants.

PERSONAL DATA

Nationality : Egyptian Birth Date : 13/01/1982

Gender : Male

Marital Status : Married

Residence : Beni Suef

EDUCATION

B. Sc. in Mechanical Power Engineering, Cairo University, 2005

LANGUAGES

Arabic : Native Language

English : Very Good

French : Fair

COMPUTER SKILLS

: Windows, MS Office, Internet

: AutoCAD

: SAP

: BFS system

TRAINING COURSES AND CERTIFICATIONS

: Off-shore training for Heat Recovery Steam Generator (HRSG) by CMI Company in BELGIUM (4 weeks).

: SIEMENS gas turbine SGT6-5000F by SIEMENS.

: SIEMENS steam turbine SST6-4000F by SIEMENS.

: SAMSUNG training in vibration monitoring.

: Siemens V94.3A gas turbine operation training course by Siemens Company.

: Alstom steam turbine 250MW operation training course.

: ALSPA DCS system (general representation "AP01-S5" and centralog operation "CL01-S5") Alspa P320 Distributed Control Systems Product operator Activities.

: Operation of Heat Recovery Steam Generation – HRSG – system (CMI).

- : Operation of feed water pumps, condensate pumps IP & HP (sigma).
- : Operation pipe rack, valves and IP & HP bypass (Skoda).
- : Hitachi Steam Turbine 250MW Operation training course.
- : Training for DCS (the ovation OV010) by EMERSON.
- : Safety and Fire fighting rules of UEEPC Training Center.
- : PERSONAL SAFETY & PROTECTION from GPILEARN site.
- : Introduction in combined cycle from GPILEARN site.
- : ATLAS COPCO Fuel gas compressor operational training.
- : SAMSUNG training in Chemical Feed System.
- : SAMSUNG training in HRSG System.
- : SAMSUNG training in Chiller Plant System.
- : SAMSUNG training in Sea Water Intake System.
- : SAMSUNG training in Electro Chlorination System.
- : SAMSUNG training in Waste Water System.
- : SAMSUNG training in Demineralization Desalination System.
- : First Aid training.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Apr. 2017 till Jun. 2019

Employer : <u>EGYPTROL</u>, SIEMENS AG Subcontractor

Project: BENI SUEF Power Plant Combined Cycle 4800MW:

- EIGHT SIEMENS Gas Turbines 8000H 8x400MW.
- Eight NEM Heat Recovery Steam Generation (HRSG) + Four SIEMENS steam turbines SST5-5000.
- Water treatment plant produce DM water, Service water, Filtrate water and potable water.
- Firefighting system.
- Water firefighting system.
- CO2 firefighting system.
- N2 generation system.
- Fuel gas system has 5 gas compressors.

Job title : Steam Turbine Commissioning Operation Engineer

Job Description

- Perform chemical cleaning and steam blowing for steam boiler.
- Pre-commissioning for steam turbine (Steam blowing, Condenser test, Bearing clearance, Float, Dump of rotor, Gear and pinion, All safety trip function and response of ESV ...etc.).
- Commissioning and load trial for steam turbine:
 - Check various pressure/temp. setting for lube oil and control oil systems.
 - Aux. steam/Seal Steam start-up/Evacuation system.
 - Cold start-up test to W/U speed (Rub check, vibration setting in level ...etc.).
 - RELS to FSNL (Check vibration setting in level, over speed trip and electrical tests ...etc.).
 - Load rejection test in min load.
 - Warm start-up test.

- Load rejection test in 50% load.
- Hot start-up test.
- Load rejection test in 75% load.
- Load rejection test at full load.
- Vacuum decay test.
- Max/min MVAR test in different loads.
- Steam turbine valves leak test.
- Steam Turbine valves test at turning gear and load run.
- Performance test.
- Safe Start-up and Shutdown Operation for All Plant.
- Reviewing results and meeting with managers to discuss methods of improving the productivity of existing systems.
- Fast Acting in Emergency Cases.
- BOP operation (cooling water system, fuel forwarding system, firefighting system).
- Identifying, investigating and repairing system faults.
- Supervising the work of manufacturing engineers.
- Train new engineers and support staff.
- Follow all safety instructions.
- LOTO.
- PTW Issuer.
- Operation procedure.

Dates : Feb./Mar. 2018 Employer : SIEMENS

Project: New Capital Power Plant Combined Cycle 4800MW:

- EIGHT SIEMENS Gas Turbines 8000H 8x400MW.
- Eight NEM Heat Recovery Steam Generation (HRSG) + Four SIEMENS steam turbines SST5-5000.
- Water treatment plant produce DM water, Service water, Filtrate water and potable water.
- Firefighting system.
- Water firefighting system.
- CO2 firefighting system.
- N2 generation system.
- Fuel gas system has 5 gas compressors.

Job title
Job Description

Commissioning Shift Charge Engineer

- Steam Turbine/Boiler commissioning & start-up and operation.
- Safe Start-up and Shutdown Operation for All Plant.
- Reviewing results and meeting with managers to discuss methods of improving the productivity of existing systems.
- Fast Acting in Emergency Cases.
- Dealing with SPPA-T3000 controller hardware and software (control system Toolbox).
- Perform chemical cleaning and steam blowing for HRSG.
- BOP operation (cooling water system, fuel forwarding system, firefighting system, ...
- Identifying, investigating and repairing system faults.
- Supervising the work of manufacturing engineers.

Train new engineers and support staff.

Follow all safety instructions.

LOTO.

Very good dealing with SAP system.

PTW Issuer.

Operation procedure.

Dates : From May 2013 till Apr. 2017

Employer : NOMAC

Project : Qurayyah Power Plant (QIPP) Combined Cycle 4000MW – KSA:

2 Modules:

Module 1:

- ❖ Six SIEMENS Gas Turbines SGT6-5000F 6x231MW.
- ❖ Six BHI Heat Recovery Steam Generation (HRSG) + Three SIEMENS Steam Turbine SST6-4000F 3x231MW.
- Module 2:
 - ❖ Six SIEMENS Gas Turbines SGT6-5000F 6x231MW.
 - ❖ Six BHI Heat Recovery Steam Generation (HRSG) + Three SIEMENS steam turbine SST6-4000F 3x231MW.
- Water treatment plant produce DM water, Service water, Filtrate water and potable water.
- Fire fighting system: Water fire fighting system, FM200 fire fighting system.
- N2 generation system.
- Fuel gas system has: 13 gas compressors, 7 reduction stations, 7 water bath heaters.
- Fuel oil system: Distillate fuel oil.
- Chilled water system.

Job title

Shift Charge Engineer

Job Description

- Combined Cycle plant commissioning & start-up and operation.
- Safe Start-up and Shutdown Operation for All Plant
- Reviewing results and meeting with managers to discuss methods of improving the productivity of existing systems.
- Fast Acting in Emergency Cases.
- Dealing with SPPA-T3000 controller hardware and software (control system Toolbox).
- Supervision for chemical cleaning and steam blowing for HRSG.
- BOP operation (cooling water system, fuel forwarding system, firefighting system,
- Identifying, investigating and repairing system faults.
- Supervising the work of manufacturing engineers, train new engineers and support staff.
- Follow all safety instructions.
- LOTO.
- Very good dealing with SAP system.
- PTW Issuer.
- Operation procedure writer.
- Train the fresh employees.
- Outage Coordinator.

Dates : From Mar. 2010 till Apr. 2013

Employer : Upper Egypt Electric Production Co. (UEEPC)

Project: El-Kureimat III Combined Cycle Power Plant 750MW:

GE GT MS9001FA 2x250MW (mark VI control system).

Alstom steam turbine 1*250MW "AlspAP320 control system".
2 Heat Recovery Steam Generation (HRSG) (CMI – Initic).

• 2 Heat Recovery Steam Generation (HRSG) (Civil – Initio).

• The plant is controlled via "AlspAP320 DCS control system".

Job titles : Shift Charge Engineer

Job Description: • Combined Cycle Plant operation and start-up.

• Safe Start-up and Shutdown Operation for all Plant.

• Reviewing results and meeting with managers to discuss methods of improving the productivity of existing systems.

Fast acting in Emergency Cases.

 Dealing with Mark VI controller hardware and software (control system Toolbox).

• Supervision for chemical cleaning and steam blowing for HRSG.

• BOP operation (cooling water system, fuel forwarding system, fire fighting system,).

• Identifying, investigating and repairing system faults.

• Supervising the work of manufacturing engineers, train new engineers and support staff.

Dates : From Jul. 2006 till Feb. 2010

Employer : Upper Egypt Electric Production Co. (UEEPC)

Project: El-Kureimat II & III Combined Cycle Power Plants (750MW):

Project 1:

- Hitachi Steam Turbine 1x250MW "mark VI control".

2 Heat Recovery Steam Generation (HRSG) CMI - SKODA.

 The plant is controlled via "EMERSON – WDPF DCS control system".

Project 2:

Alstom Steam Turbine 1x250MW "AlspAP320 control system".

2 Heat Recovery Steam Generation (HRSG) (CMI – Initic).

The plant is controlled via "AlspAP320 DCS control system".

Job title : STG / Boiler Operation & Start-up Engineer

Job Description: • Steam Turbine / Boiler operation and start-up.

 Supervising the Testing, Start-up, and Commissioning for SIEMENS gas turbine / Steam Turbine / HRSG and its electrical sub-system and

auxiliaries.

Supervising generators testing and commissioning.

 Dealing with Mark VI controller hardware and software (control system Toolbox).

Dealing with equipments during start-up, shutdown.

MV & LV operation (16.5KV, 18KV, 6.3KV, 400 V, ...).

• G.I.S. switchyard 220KV operation.

Supervision for chemical cleaning with CMI Company.

Supervision steam blowing for HRSG I & II and steam turbine piping.

Supervision commissioning for HRSG I & II and pipe rack equipments.

Supervision commissioning for steam turbine and its auxiliaries.

Identifying, investigating and repairing system faults.

Dates : From Dec. 2005 till Jun. 2006

Employer : BUHLER MILLS

Job title : Maintenance Engineer

Field of experience:

Over 13 years experience in following Power Station projects:

- Beni Suef Siemens as a Commissioning Shift Charge Engineer for Siemens Steam Turbine frame SST5-5000/NEM Boiler.
- New Capital Siemens as Commissioning Shift Charge Engineer for Siemens Steam Turbine frame SST5-5000/NEM Boiler/Siemens GT 8000H.
- Qurayyah QIP.P. NOMAC as a Shift Leader in Combined Cycle (QIPP project) 4000MW.
- El-Kureimat 3 as a Shift Leader in combined cycle power plants 750MW "ALSTOM Steam Turbine / GE 9FA".
- El-Kureimat 2 as a Steam Turbine Operation Engineer.
- Dealing with Mark VI & SPPA T3000 & ALSPA and Emerson Ovation software (control system Toolbox).
- Take training courses as SGT6-5000F (5), Siemens V94.3A gas turbine operations gas turbine operations, ALSPA P320 (DCS), SPPA-T3000 (DCS), etc...
- Very good dealing with SAP & BFS system.