

**100389-MEC-1OSY-E-2002**  
**Lead Mechanical Commissioning Engineer**

Holds a B. Sc. in Mechanical Power Engineering and a Diploma in hydraulic machines and piping system. Has about 19 years hands-on experience working in operation, commissioning and start-up at several Power Stations.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 04/09/1977  
Gender : Male  
Marital Status : Married

## EDUCATION

: B. Sc. in Mechanical Power Engineering, Mansoura University, 2002  
: Diploma in hydraulic machines and piping system, Mansoura University, 2009

## LANGUAGES

Arabic : Native Language  
English : Good

## COMPUTER SKILLS

: Windows, MS Office, Internet  
: AutoCAD

## TRAINING COURSES AND CERTIFICATIONS

: Certified in supervising the operating of pumps, compressors, boiler, turbine and all equipment of power plants.  
: ICDL course.  
: Certified in English (Jul. 2009).  
: Training at Talkha Power Plant (Jul. 2001).  
: Steam turbine operation course (Sep. 2004).  
: AutoCAD 2004 course (2008).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Oct. 2019 till now  
**Employer** : Elsewedy Electric PSP  
**Project** : Assiut (650MW) Supercritical Steam Power Plant

**Job title** : Lead Mechanical Commissioning Engineer

**Job Description** :

- Review contractual documentation.
- Review engineering documents to ensure that the commissioning & startup requirements are accounted for in the design.
- Prepare and keep up-to-date the pre-commissioning and commissioning execution plans (including the schedule and the mobilization of personnel and equipment).
- Supervise the preparation of the pre-commissioning and commissioning procedures.
- Supervise the preparation of the performance test procedures and of the operating manuals with the process team.
- Assist procurement group for the definition of vendor assistance.
- Assist subcontract group for the scope definition of work contractors.
- Manage the execution of pre-commissioning, commissioning and start-up.
- Prepare the commissioning progress reports to the project management and to the commissioning department.
- Coordinate assistance of the Vendor representatives.
- Supervise, if required, the performance tests.
- Assist the Project Manager in contacts with Client representatives for the handover of the plant.
- Ensure the preparation of final reports and certificates.

**Dates** : From Jun. 2016 till Oct. 2019

**Employer** : Elsewedy Electric PSP

**Project** : Beni Suef (4x1200MW) Combined Cycle Power Plant (Fast Track Project)  
The plant consists of 8 gas turbines SIEMENS SGT5-8000H with control system SPPAT3000 + 8 NEM HRSG (Pinson Tech.) + 4 Siemens STG.

**Job title** : Lead Mechanical Commissioning Engineer

**Job Description** :

- Perform all GT systems pre-commissioning (lifting & lube oil, Hydraulic oil, HCO, fuel gas, Blow off, Seal oil systems).
- Perform and cooperate with PSP staff in order to performing all commissioning and pre-commissioning work of BOP systems (Closed cooling, firefighting and demi water, Instrument air and service air systems).
- Support GT performance test activities.
- HRSG hydro-static pressure test (Boiler, non-boiler NEM scope and BOP systems).
- Dry Lay Up after Hydro test by dry air.
- Valves (control v/v + check v/v + strainers) preparing for hydro-test and valves reinstatement after hydro-test and after chemical cleaning.

**Dates** : From Sep. 2015 till Jun. 2016

**Employer** : Elsewedy Electric PSP

**Project** : Attaqa (4x160MW) Simple Cycle Power Plant (Fast Track Project)  
The plant consists of 4 gas turbines SIEMENS SGT2000E with control system SPPAT3000.

**Job title** : Mechanical Commissioning & Operation Engineer

**Job Description** :

- Perform all GT systems commissioning (lifting & lube oil, Hydraulic oil, fuel gas, Blow off, air intake and CO2 FF systems).

- Support and cooperate with PSP staff in order to performing all commissioning work of BOP systems (Closed cooling, fin fan coolers, demi water, Instrument air and service air systems).
- Support GT performance test activities.
- Support, cooperate and Following up PSP operation team during reliability test.
- Perform fuel oil commissioning.
- Perform and assist to achieve the optimum operation conditions for the unit operation during testing and normal operation from field and DCS.
- Assist and perform with the power plant operation staff on daily basis to achieve the optimum conditions for the unit operation during all the start-up tests and activities.

**Dates** : From Mar. 2015 till Sep. 2015  
**Employer** : Elsewedy Electric PSP  
**Project** : Al-Dewania (9E 4x125MW) GE Simple Cycle Power Plant  
**Job title** : Mechanical Commissioning & Operation Engineer  
**Job Description** :

- Cooperate with GE TFA to perform all GT systems commissioning (lifting & lube oil, Hydraulic oil, fuel gas, Blow off, air intake and CO2 FF systems).
- Performing all commissioning work of BOP systems (Closed cooling, demi water, Instrument air and service air systems).
- Doing commissioning tests of plant & start-up for all auxiliary equipments and systems of the plant.
- Perform and assist to achieve the optimum conditions for the unit operation during the activities from field and DCS.
- Assist and perform with the power plant operation staff on daily basis to achieve the optimum conditions for the unit operation during all the start-up tests and activities.

**Dates** : From Jul. 2013 till Mar. 2015  
**Employer** : Hitachi Power Technologies  
**Project** : BANHA 750MW CCGT Power Plant  
**Job title** : Mechanical Commissioning & Operation Engineer  
**Job Description** :

- Working for HPT (Hitachi Power Technologies) CP-118 Contractor at BANHA Combined Cycle Gas Turbine Power Plant (750MW), Two (250MW) GE gas turbines Frame (9FA), Two HRSG Ansaldo Caldai, One 250MW Steam Turbine (Ansaldo Energia).
- Doing commissioning tests & start-up for all auxiliary equipments and systems of the plant.
- Perform and assist to achieve the optimum conditions for the unit operation during the steam blow-out activities for HP steam, HRH & CRH steam, and LP steam lines as B.O.P operator from field and DCS.
- Assist and perform with the power plant operation staff on daily basis to achieve the optimum conditions for the unit operation during all the start-up tests and activities.
- CP-118 contract including next equipments:
  - Pump house (Three circulating water pumps + two service water pumps + two raw water pumps + Silt dredge system + Bearings lubrication water skid).

- Two Bearing flushing water pumps.
- Condensate water system.
- Feed water system (Three electrical HP/IP pumps + Three electrical LP feed water pumps).
- Demi transfer system and demin. NOx pumping system.
- Fire fighting system.
- Two H<sub>2</sub> generation units.
- EDG system.
- SA, IA compressors and dryers system.
- Potable water skid.
- Liquid fuel unloading and forwarding pumping system.
- Liquid fuel treatment skid (ALFA LAVAL fuel separators).
- Sump pits pumping system.
- CCW system.
- Pipe rack including valves, venting and draining systems.

**Dates** : From Apr. 2012 till Jul. 2013

**Employer** : Power System Projects (PSP)

**Project** : ABU QIR Thermal Power Plant (2x650MW)

**Job title** : Mechanical Start-up & Commissioning Engineer

**Job Description** :

- Carry out all commissioning activities as per manufacture recommendation.
- Perform the chemical cleaning according procedures for the piping.
- Perform and assist to achieve the optimum conditions for the unit operation during the steam blow-out activities for HP steam, HRH & CRH steam and LP steam lines as B.O.P. operator from field and DCS.
- Assist and perform with the power plant operation staff on daily basis to achieve the optimum conditions for the unit operation during all the start-up tests and activities.
- CP-118 contract including per unit:
  - Pump house (Two Sulzer circulating water pumps + Two Sulzer service water pumps + bearing flushing water skid + sump pumps).
  - Condensate water system.
  - Feed water system (with one start-up electrical pump (25%) + two turbine feed water pumps (2x60%)).
  - Demi transfer system and condensate transfer system.
  - Two desalination units (M.E.D.).
  - Re-boiler system, sump pump system and sample rack.
  - 4 LP Heaters, Deaerator, 3 HP heaters including steam and water system.
  - Fire fighting system and H<sub>2</sub> generation unit.

**Dates** : From Oct. 2010 till Mar. 2012

**Employer** : Middle Delta Electricity Production Co.

**Project** : Talkha Steam Power Plant (2x210MW):

- SKODA boiler (680 ton/hr – 165 bar – 540 °C).
- Type of fuel: Fuel-light oil (L.F.O.): two pumps (discharge pressure 25 bar).
- Heavy oil (H.F.O.): four low-pressure pumps, four high-pressure pumps (discharge pressure about 37 bar and not less than 135 °C).
- Natural gas system: two gas pressure-reducing stations from 7.5 bars

to 2.5 bar.

- Two F.D. fans, two G.R. fans, two R.A. heaters.
- Two S.C.A. heaters, three flame scanners fans.
- Boiler Control system: BMS-ABB INFI 90 & PGP GRAPHIC SYSTEM.
- SKODA Turbine (210MW).
- Generator:
  - Rating Power 227 MVA.
  - Armature voltage 15.75 KV.
  - Armature current 10153 A.
  - Frequency 50 Hz.
  - Power factor 0.8.
  - Operating speed 3000 rpm.
  - Winding connection "Star".
  - Type of filed voltage excitation: static.
- Pump house (Four circulating water pumps (11000 ton/hr./PMP) + two service water pumps + Firefighting system + sump pumps + Electrical screens).

**Job title** : Operation Leader Engineer

**Job Description** : 

- Manage and oversee the daily operations of the power plant.
- Monitor operations for efficiency and safety ensuring that all applicable regulatory requirements are followed.
- Issuing work permits & instructions of LO-TO procedures.
- Oversee technical staff (maintenance and operators).
- Training new personnel.
- Contribute in plant troubleshooting.
- Liaison with other departments to accomplish planned maintenance schedule.
- Lead and direct the work of operation team.
- Preparing performance reports of plant to top management.
- Liaison with Dispatch to determine outage timing.
- Doing unit trip analysis report.

**Dates** : From Oct. 2009 till Sep. 2010

**Employer** : Dubai Electricity & Water Authority (DEWA)

**Project** : MSF Desalination units (k43, 44, 45), Output = 3 x 45461 m<sup>3</sup>/day – Dubai

**Job title** : Operation Engineer

**Job Description** : 

- Operating and reviewing the parameters for all desalination equipments to make sure that all equipments work in safety conditions (Sea water pumps house, hypo-plant, heat recovery and heat reject sections, brine heater, vacuum system, blending plant).
- Reviewing and preparing the condition for all equipments to make sure that all equipments are ready before starting it's operating during the unit start-up or normal operating (normalizing – warm up).
- Antiscallent and antifoam tanks preparing and (OLTC) sorting.
- Hypochlorite-plant and blending unit start-up and operating.
- Reviewing the operating parameters for all equipments to make sure that all equipments work in safety conditions.
- Working on and isolate the deluge system as preparing for maintenance activities or tests.
- Racking in and out all types of (MV – LV) switchgears or breakers.

**Dates** : From Aug. 2007 till Sep. 2009  
**Employer** : Middle Delta Electricity Production Co.  
**Project** : Talkha Steam Power Plant (2x210MW)  
(steam turbine and boiler and its auxiliaries made by SKODA)  
**Job title** : Shift Charge Engineer  
**Job Description** :

- Responsible for proper operation and monitoring of the boiler, turbine and their facilities related to the plant, carry out start-up, shutdown, routine and emergency operation of the plant as required, maintain log of all operation activities.
- Responsible for issuing of job work orders and to record equipment history over CMMS system.
- Compile various reports: daily performance calculations, unit trip analysis.
- Liaison with other departments in related activities.

**Dates** : From Jul. 2004 till Jul. 2007  
**Employer** : Middle Delta Electricity Production Co.  
**Project** : Talkha Steam Power Plant (2x210MW)  
**Job title** : Boiler Operator (Control Room & Field Operator)  
**Job Description** :

- Operating the boiler properly regarding:
  - Outlet steam properties and inlet feed water properties (temperature, pressure, PH No, conductivity and percentage of silica).
  - Inlet air and outlet flue gases properties (temperature, pressure, excess air percent and (CO, CO<sub>2</sub>, O<sub>2</sub>) percent.
  - Keep the previous parameters at the optimum operating values.
- Boiler including:
  - SKODA boiler (680 ton/hr. – 165 bar – 540 C).
  - Type of fuel: light-fuel oil (L.F.O): two pumps (discharge pressure 25 bar).
  - Heavy oil (H.F.O.): four low-pressure pumps, four high-pressure pumps (Discharge pressure 37 bar and not less than 135 C).
  - Natural gas system: two gas pressure-reducing stations from 7.5 bar to 2.5 bar.
  - Two F.D. fans, two G.R. fans, two R.A. heaters.
  - Two S.C.A. heaters, three Aux fans.
  - SKODA Turbine (210MW).
  - Generator: (Rating Power 227 MVA, voltage 15.75KV, current 10153 A).
  - Pump house (four circulating water pumps (11000ton/hr./PMP) + two service water pumps.
  - Firefighting system + sump pumps.

**Dates** : From Mar. 2003 till Jun. 2004  
**Employer** : AQWA TREAT Co. for water treatment  
**Projects** :

- New Damietta City wastewater lifting and treatment stations (7 lifting stations + treatment station – Capacity: 1900m<sup>3</sup>/day)
- New Damietta City and Ras-Elbar City drinking water treatment station (Capacity: 1m<sup>3</sup>/s)

**Job titles** : Operation & Maintenance Engineer / Workshop Manager