100232-MEC-MOS-E-2000
Mechanical Engineer

Holds a B. Sc. in Mechanical Production Engineering and has more than 13 years of work experience in different type of power plants (thermal power plants, simple and combined cycle up to 4000MW) in pre-commissioning, commissioning and start-up activities.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	24/01/1978
Gender	:	Male
Marital Status	:	Married
Residence	:	Currently KSA

EDUCATION

: B. Sc. in Mechanical Production Engineering, Alexandria University, 2000

LANGUAGES

Arabic	:	Native Language
English	:	Fluent

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: AutoCAD 2000

TRAINING COURSES AND CERTIFICATIONS

: Training at Damanhour Power Station (325MW).
: Training at Damanhour Power Station (3x65MW).
: Training course at operating of power station (Cold and Hot condition) at Abu Qir Training Center.
: English Courses (6 Levels) at Abu Qir Training Center.
: Training course at maintenance of the steam boiler (natural and circulation) types.
: Operation of Gas Turbine (GE 9FA) in Kuwait.
: HVAC maintenance course at Abu Qir Training Center.
: ICDL

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2013 till now
Employer : EGYPTROL – Commissioning Subcontractor for SAMSUNG C&T
Project : Qurayyah Independent Power Project (6x750MW) – Combined Cycle, KSA
Job title : P.T.W / LOTO Manager
Job Description :

- Lock out tag out S.A.P.
- To undertake the daily running of permit to work office in conjunction with commissioning the 4000MW Gas and Oil Fired SIEMENS Machines.
- To participate in isolation and de-isolation of plant and equipment and the return to service of the plant or apparatus as required.
- Allocation of work schedules, verify documentation to ensure the isolation is correctly applied.
- Working knowledge of all hazards on a CCPP i.e. mechanical (pressure, temperature, stored energy), electrical 24 V - 380KV (batteries, switchgear, cables, breakers, etc.), chemical (acid, alkalis, dust, confined spaces, etc.).
- Team player helps and pro-actively works towards a common goal supporting other members of commissioning staff.
- Able to perform gas testing in hazardous area or confined space, supervising staff, training staff.
- Assist in identifying system boundaries prior accepting ECC packages.
- Where necessary supervise activities to maintain safety.
- Liaise with contractors in determining the work requirements.
- Support operation and commissioning activity.
- Coordination between commissioning and construction.
- Able to discuss and mutually agree action, proactive with fault or problem finding and solving.

Dates : From Sep. 2012 till Jun. 2013
Employer : ANSALDO CALDAIE
Project : ABU QIR THERMAL POWER PLANT 2x650MW
Job title : Shift Charge Engineer
Job Description :

- Carry out all commissioning activities as per ANSALDO CALDAIE manufacture recommendation.
- Perform the chemical cleaning according procedures for the boiler.
- Perform the steam blow-out activities for HP steam, HRH &CRH steam, and LP steam lines.
- Lock out Tag out responsible Engineer.
- Assist thermal power plant Commissioning & start up staff on daily basis to achieve the optimum operation conditions for the boiler.
- Boiler including:
  - ANSALDO CALDAIE RADIENT BOX BOILER (574.3 KG/S – 183.3 bar – 545 C).
  - Hot Reheat (481 KG/S - 41.1 BAR – 565 C).
  - Type of Fuel: Fuel Oil – N.G.
  - Number of Burners: 30 Burners (Front –Rear Wall).
  - Two F.D. Fans for each Boiler with Total Flow 2 x 296.8 KG/S.
  - Two G.R. Fans for each Boiler with Total Flow 2 x 29.7 KG/S.

- Two R.A. Heaters.
- Two S.C.A. Heaters.
- THREE FLAME SCANERS FANS.

Dates : From Dec. 2011 till Sep. 2012
Employer : EGYPTROL, Commissioning Subcontractor for ANSALDO ENERGIA
Project : 6th October Power Station (600MW)
Job title : Commissioning & Start-up Engineer
Job Description :

- Carry out all commissioning activities for Ansaldo gas turbine AE94.2 as per manufacture recommendation.
- Commissioning & start-up for Ansaldo gas turbine AE94.2.
- Follow up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system …).
- Follow up commissioning & start-up for GT AUXILIARY.
- Follow up the project daily works (piping, welding, and all auxiliary equipment).
- Follow up commissioning & start-up for firefighting system for gas turbine portion.
- Line up for (lube oil, control oil, air and fuel gas, instrument air, …) before initial fire.
- Assist gas turbine operation staff on daily basis to achieve the optimum operation conditions for the units.
- Lock out tag out responsible Engineer.

Dates : From Jan. 2011 till Dec. 2011
Employer : West Delta for Electrical Production Co.
Project : Damanhour Steam Power Station 320MW Unit:

- Babcook Wilcox boiler (1050 ton/hr – 175 bar – 540 °C).
- Type of fuel: Fuel-light oil (L.F.O.): Two pumps (discharge pressure 12 bar).
- Heavy oil (H.F.O.): Two low-pressure pumps, three high-pressure pumps (Discharge pressure about 20 bar and not less than 90 °C).
- Natural gas system: Two gas pressure-reducing stations from 7.5 bars to 3 bars.
- Boiler Control system, BMS, BPS, BOP (DCS - ABB Symphony Harmony with Conductor N.T. HMI (Human Machine Interface)).
- Ansaldo Turbine (325MW): Tandem compound double flow (TCDF).
- Turbine Control system: SPA ANALOGE EHC.
- Generator:
  - Rating Power 422 MVA.
  - Armature voltage 22 KV.
  - Armature current 11073 A.
  - Frequency 50 Hz.
  - Power factor 0.8
  - Operating speed 3000 rpm.
  - Winding connection "Star".
  - Type of field voltage excitation: static.

Job title : Shift Charge Engineer

Job Description :

- Operation of unit and auxiliaries using DCS system.
- Assure satisfactory operation of the assigned plant (boiler & turbine and generator) with the appointed crew.
- Supervise, instruct and coordinate with the assigned crew efficiently and effectively to fulfill their job functions and assignments.
- Mechanical Maintenance Supervisor for Rehabilitation work at Damanhur Power Station for steam turbine ANSALDO 325MW and its auxiliaries.

Dates : From Oct. 2010 till Jan. 2011

Employer : Ansaldo Energia

Project : El-Atf Power Plant

Job title : Shift Charge Engineer

Job Description :

- Operation Engineer for steam turbine ANSALDO 250MW Unit and its auxiliaries.
- Control system ABB operating system (PGP).
- Steam turbine auxiliaries:
  - Lube oil system.
  - Control oil system.
  - Lifting oil system.
  - Seal oil system.
  - Seal steam system.
  - Steam packing exhaust system.
  - Vacuum system.
  - Debris system.
  - Ball cleaning system.
  - HP & IP bypass system.

Dates : From May 2009 till Oct. 2010

Employer : Power Generation Engineering and Service Company (PGESCO)

Project : El-Atf Combined Cycle Power Plant

Job title : Power Station Commissioning & Start-up Engineer

Job Description :

- Gas turbine: 2x250MW MITSUBISHI frame M701 F: Pre-commissioning, commissioning & start-up activities for:
  - 2 gas turbines (lube oil flushing, control oil flushing, seal oil flushing, air blow, etc.).
  - GT Auxiliary (Motor test, Heat run test, etc.).
  - Gas Compressor Atlas Copco as Supervisor.
  - Fire fighting system with Minimax Company for gas turbine area & gas compressor area.
- HRSG: two NEM's Heat Recovery Steam Generators attached to Exhaust of Gas Turbines.
  - Pre-commissioning, commissioning & start up activities for:
    - YOKOGAWA operating system.
    - Steam Blow through.
    - HRSG Tuning and Optimization.

        - Safety Valves Testing.
        - Punch listing.
        - Chemical Dosing system (watcon).
        - Sampling system (watcon).
        - M.O.V. & Pneumatic control valves testing.
        - HRSG, Boiler & Drums internal inspections.
        - Boiler Maintenance.
    - Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed water system pipelines.
    - Perform the steam blow-out activities for HP steam, HRH & CRH steam and LP steam lines.
- Steam turbine: ANSALDO 250MW:
    - Pre-commissioning, commissioning & start-up activities for:
        - ABB operating system.
    - Commissioning & start-up for:
        - Lube Oil system.
        - Seal oil system.
        - Seal Steam System.
        - Vacuum system.
        - Debris System.
        - Ball cleaning system.
        - HP & IP Bypass system.
    - Control system: ABB INFI 90 and PGP operating system.
- Auxiliary system: Pre-commissioning, commissioning & start-up activities for:
    - Condensate system & condensate pumps.
    - Feed water system (LP, HP/IP) & FWP's.
    - Circulating water system & CW pumps.
    - Sump pumps.
    - Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed water system pipe lines.
    - Perform the steam blow-out activities for HP steam, HRH & CRH steam, LP steam lines.
    - Perform the sequence test for the following systems:
        - Condensate system & condensate pumps.
        - Feed water system (LP, HP/IP) & FWP's.
        - Circulating water system & CW pumps.
        - Service water system.
        - Closed cooling system.
        - Instrument and service air system.
    - Record the commissioning data for all systems mentioned previously.
    - Report and advise the daily activities for all systems mentioned previously.

Dates : From Aug. 2008 till Apr. 2009
Employer : ISECO

Project : Shuaiba North Combined Cycle Power Plant – Kuwait
Job title : Commissioning, Start-up & Operation Engineer
Job Description : 3 Gas Turbines (3x215MW) GE 9FA GAS TURBINE combined with Steam turbine (215MW) Toshiba & 3 Water Distillation units (45 M Gallon/Day).

Dates : From Feb. 2008 till Jul. 2008
Employer : ISECO
Project : Shuaiba South Power Plant – Kuwait
Job title : T.C.R. Operation Engineer
Job Description : 6x135MW (Toshiba) and 6 water distillations units (36 M Gallon/Day).

Dates : From Apr. 2004 till Feb. 2008
Employer : West Delta for Electrical Production Co.
Project : Damanhour Steam Power Station (320MW):

- Babcock Wilcox boiler (1050 ton/hr – 175 bar – 540 C).
  - Type of fuel:
    - Fuel-light oil (L.F.O.): Two pumps (discharge pressure 12 bar).
    - Heavy oil (H.F.O.): Two low-pressure pumps, three high-pressure pumps (discharge pressure about 20 bar and not less than 90 C).
  - Natural gas system: Two gas pressure-reducing stations from 7.5 bars to 3 bars.
  - Boiler Control system: BMS-ABB INFI 90 and PGP GRAPHIC SYSTEM.
- Ansaldo turbine (325MW):
  - Tandem compound double flow (TCDF).
- Turbine Control system: SPA ANALOGE EHC.
- Generator:
  - Rating Power 422 MVA.
  - Armature voltage 22KV.
  - Armature current 11073 A.
  - Frequency 50 Hz.
  - Power factor 0.8.
  - Operating speed 3000 rpm.
  - Winding connection “Star”.
  - Type of filed voltage excitation: static.

Job title : Shift Charge Engineer
Job Description :

- Operation of steam turbine, boiler and its equipment from control room using DCS system.
- Operation of auxiliaries system such as:
  - Nile pumping station for the units.
  - Electrical power systems of the units (Exciters, Generators, Common Auxiliaries, Transformers, 6KV, 400V, Busbar, UPS System, Diesel Power Generator System).
  - Safety and extinguishing engineering system (Hallon, FM200, Foam, CO2, Powder, Water extinguishing equipments).
  - Feed water system, water system of generator, vacuum pumps system.
- Assure satisfactory operation of the assigned plant (boiler & turbine and generator) with the appointed crew.

- Supervise, instruct and coordinate with the assigned crew efficiently and effectively to fulfill their job functions and assignments.
- Check and review the operating conditions and records in order to investigate the weak and troublesome point in advance of any occurrence.
- Maintain the operating equipment and facilities in sound and clean conditions.
- Maintain detailed operation logs for all operation activities and Assist in reporting to the Head Office about plant activities during the month.
- Carry out isolation of the equipment for planned and emergency maintenance and normalization of the plant thereafter.
- Responsible of training the new staff of Engineers or Technicians.
- Follow safety rules and ensure close adherence to the safety, environmental and quality requirements.
- Worked in the modification of the boiler firing system and changing the Firing guns to reduce Nox contents.
- Responsible of the 220KV bus bars connected to the unit (operation from control room or from GIS room) and making maneuvers with the national control center of electricity in Egypt.

Dates : From Aug. 2003 till Apr. 2004
Employer : Chemonics Egypt
Project : Damanhour Drinking Water Station
Job title : Construction Engineer

Dates : From Jan. 2001 till Jun. 2003
Employer : Egyptian Military Force
Job title : Operation & Maintenance Engineer
Job Description : 3x1.2MW Diesel Generators Service Air Compressors

Field of experience :

- Working on various Projects in different Countries (Egypt, Kuwait, Saudi Arabia), different type of Gas Turbines, different type of steam turbines, cooperation with multinational and multi discipline commissioning teams.
- Developing technical knowledge of Power Plants processes and main components such as Gas and Steam Turbines packages, HRSGs, Steam Generators, Air and Water Condensers, fuel gas and fuel oil equipment's, utilities.