100170-MEC-OS-E-2003
Lead Mechanical Commissioning Engineer

Holds a B. Sc. in Mechanical Engineering and has about 16 years hands-on experience in installation for gas turbine, steam turbine, boilers and related auxiliaries in power plants. Worked in all aspects of commissioning, start-up and operation for all mechanical equipments (static and dynamic) and has good understanding of P&ID drawing, pipe line installation, commissioning, under & above ground piping, pumps and valves.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	28/02/1981
Gender	:	Male
Marital Status	:	Married
Residence	:	Currently KSA

EDUCATION

: B. Sc. in Mechanical Engineering, Alexandria University, 2003

LANGUAGES

Arabic	:	Native Language
English	:	Fluent

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

: Operation of gas turbine, Mitsubishi Heavy Industrial, El-Atf site.

: Operation of steam turbine, Ansaldo Energia, El-Atf site.

: NEM – B.U. industrial & utility boilers, 7550 al Hengelo, Netherlands, El- Atf site:

- HRSG Operation and maintenance.
- HRSG controls and instrumentation.
- HRSG water chemistry and safety.

: CENTUM CS 3000 R3 Fundamentals for operation, Yokogawa Middle East, El-Atf site.

: Maintenance and operation of horizontal pumps & sump pump, Toshiba, El- Atf site.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Dec. 2012 till Apr. 2017

Employer : ARABIAN BEMCO CONTRACTING CO. LTD

Projects :

- PP10 Combined Cycle Power Plant (3600MW), 10 (4x4x1), Riyadh, Saudi Arabia: The plant consists of 10 blocks each block has 4 GT (GE Frame 7EA), 4 HRSG dual pressure (NEM) and 1 STG (GE SC4) with ACC.
- QURAYYAH Combined Cycle Power Station (3600MW), 6 (3x3x1): The plant consists of 6 blocks each block has 3 GT (GE Frame 7FA), 4 HRSG Triple pressure (Doosan and CMI) and 1 STG (GE D11).

Job title : Lead Mechanical Commissioning Engineer

Job Description :

- Commissioning and start-up for HRSG, BOP and steam turbine.
- Responsible for:
  - Follow up the steam turbine construction activities, pre-alignment, final alignment and bump check.
  - Commissioning and start-up of the steam turbine including trouble shooting during normal operation.
  - Follow the periodic maintenance of the steam turbine.
  - Follow up the construction activities (line check, hydro test, final walk down, HRSG'S box up) to confirm the readiness of the system's.
  - Commissioning and start-up for all system's related to HRSG'S.
  - Lead the activity of chemical cleaning, preservation, ACC cleaning and steam blow out.
  - Pre-commissioning and commissioning for BOP systems.
- Lead the warranty activities overall the combined cycle.
- Responsible for:
  - Provide an overall coordination and administration of the warranty commitments for the project as per the contractual terms signed off with the client.
  - Analyze system malfunctions and make repairs under tight schedules working independently at times.
  - Qualify and quantify all the warranty claims that arise and ensure that the claims are genuine and are attended to with minimum downtime or inconvenience to the customer and in a cost effective manner.
  - Gather, compile, and organize all support data and technical information required to properly substantiate, submit, and recover warranty claims from OEMs and other service providers as the case may be.
  - Work with the projects, installation, commissioning and maintenance teams to ensure failed parts are returned with proper information to the warranty parts holding area for disposition and to verify all new equipment information is captured in the system for future warranty tracking.

Dates : From Mar. 2011 till Dec. 2012

Employer : KHARAFI NATIONAL Co.

Projects :
- Damietta Power Station 4x125MW GE (Mark VIe – frame 9E), Fast Track Project
- West Damietta Power Station 4x125MW GE (frame 9E – Mark VIe)

Job title : Commissioning & Start-up Engineer

Job Description :
- Commissioning and start-up for simple cycle power plant.
- Responsible for:
  - Follow the installation activities of the GT'S.
  - Commissioning and start-up for 8 GT (GE frame 9E).

Dates : From Jun. 2009 till Feb. 2011

Employer : Middle Delta Electricity Production Company

Project : El-Atf 750MW Combined Cycle Power Station

The plant consists of 1 block has 2 GT (MHI Frame M701F), 2 HRSG (NEM) and 1 STG (ANSALDO).

Job title : Commissioning, Start-up & Operation Engineer

Job Description :
- Supervise all the commissioning activity during the project - GT, HRSG and STG commissioning and start-up.
- As Owner Representative Mechanical Engineer responsible for:
  - Commissioning, start-up and operation of gas turbine Mitsubishi 2x250MW, M701F and it's related auxiliaries such as:
    - Lube oil unit.
    - Hydraulic oil unit.
    - Purge air compressor.
    - GT by pass damper.
    - Fuel gas compressor.
    - Vibration monitoring system.
    - Turbine cooling air cooler (TCA).
    - Hydrogen filling system for cooling generator.
    - Hydrogen releasing system by using air after using CO2.
    - CO2 fire fighting system.
  - For NEM HRSG boilers:
    - Perform the chemical cleaning according to procedures for condensate system & feed water system.
    - Perform the steam blow-out activities for HP steam, HRH & CRH steam, LP steam lines.
  - Commissioning, start-up and operation of steam turbine ANSALDO (250MW) and it's related auxiliaries such as:
    - Lube oil system.
    - Hydraulic oil system.
    - Jacking oil system.
    - Hydrogen filling system for cooling generator.
    - Vacuum system.
    - STF condenser.
    - Seal oil system.
  - Commissioning and testing for the following systems:
    - Condensate system & condensate pumps.
    - Feed water system (LP, HP/IP) FWP's.
    - Circulating water system & CW pumps.

        - Sump pumps.
    - 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.
        - Potable water system.
        - Cooling water intake equipment (sluice gate, traveling screen).
    - Record the commissioning data for all systems mentioned previously.
    - Report and advise the daily activities for all systems mentioned previously.
- As Owner Operation Engineer responsible for:
    - Conducting all preparation steps of units in field to realize permissive for start-up from control room such as:
        - Filling line of water free of bubbles.
        - All safety valves ready.
        - Coolers in service.
        - All skids of hydraulic and pneumatic ready.
        - Fire fighting ready.
        - All electrical power source ready.
        - Position of motorized valves in auto mode and ready to work locally.
        - All manuals valves before and after control.
        - Motorized valves shall be open, etc.
    - Responsible for start-up, operation, remarking alarms of units from control room and solve operation problems.
    - Survey in field for more check and confirmation of safe operation of equipment.

Dates : From 2005 till 2009

Employer : Middle Delta Electricity Production Company

Project : El-Mahmoudia Power Station

The plant consists of 2 blocks each block has 4 GT (GE LM2500), 4 HRSG dual pressure (NEM) and 1 STG (GE).

Job title : Shift Operation Engineer

Job Description :

- Operation of GE gas turbine 8x25MW each (MS5001frame P) and it's related auxiliaries, 8 NEM HRSG, 2x58MW GE steam turbine and it's related auxiliaries.
- Also condensate system & condensate pumps, circulating water system & circulation pumps, Feed water system & pumps, Sump pumps.
- Responsible for:
    - Unit start-up and shutdown procedures.
    - Monitoring parameters.
    - Daily reports.
    - Testing the equipments.
    - Isolation and de-isolation procedures.
    - Safety work permit system.

- Watching the following maintenance sections for steam turbine GE (58MW) Mark V:
  - Making major inspection.
  - Overall maintenance for condensate pumps (10 stages), vertical pumps.
  - Maintenance for travel screen and main cooling pumps, hydraulic power unite, air compressors and steam turbine auxiliaries such as ejectors, lubrication system and condenser.

Dates : From 2003 till 2005

Project : Military Service

Job Description :

- Experience in the maintenance and operation of power plants (diesel- powered), which is used in the management of radars stations for air defense troop.
- Types of power plants (diesel-powered), which dealt with: Cummins, Perkins, Deutch, Onan, 1D6, AD10, Caterpillar.

Field of experience :

- Installation, commissioning, start-up and operation for:
  - Gas turbine (GE FRAME (9E, 7FA, 7E and MITSUBISHI FRAME M701F).
  - Heat recovery steam generator HRSG system of NEM, DOOSAN, CMI.
  - Steam turbine of GE, ANSALDO.
  - MSF (multi stage flash desalination).
  - WWN, Waste water neutralization plant.
  - Demineralization and hypo chlorination plant units.
- Hands-on and supervision of all installation aspects for pre-commissioning and commissioning activities in accordance to works schedule, manpower and resources.
- Support all Commissioning Managers and site personnel leading in pursuit to site, corporate policies, Safety Regulations and local Authorities and standards.
- Main Achievements:
  - Excellent mechanical skills working style in adherence to tight time schedule.
  - Technically demanding environments and in concord to project contract specification.
  - Worked on major Power Plant Projects includes installation of gas turbine, HRSG, steam turbine, boilers and related auxiliary Units.
  - Versified with all aspects of BOP, Commissioning, O&M and for all mechanical equipment.
  - Proficient in Thermodynamic charts, Steam table, Heat and Mass Balances, Flow Diagrams, P&ID, pipe line calculation and installation.
  - Familiar with erection, chemical cleaning procedure, steam blowing and commissioning.
  - Managing construction and commissioning activities for static equipment (Tanks, Vessels, Pipelines, etc.) as well as large size rotating equipment such as Pumps and compressors.