100792-MEC-MOS-E-2003
Senior Mechanical Engineer

Holds a B. Sc. in Mechanical Engineering and has about 10 years hands-on experience. Excellent mechanical skills and working to strict deadlines within technically demanding environments. Major projects of power plant have includes installation for gas turbine, steam turbine, boilers and related auxiliaries. All aspects of commissioning, start-up and operation for all mechanical equipments (static and dynamic) to be according client contract specification and manufacture requirement. Understanding of P&ID drawing and pipe line installation commissioning, under & above ground piping, pumps and valves.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	16/05/1982
Gender	:	Male
Marital Status	:	Married
Residence	:	Currently KSA

EDUCATION

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

LANGUAGES

Arabic	:	Native Language
English	:	Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

: Operation & Maintenance of gas turbine GE, El-Mahmoudia site.
: Operation of gas turbine, Mitsubishi Heavy Industries, El-Atf site.
: Operation of steam turbine, Ansaldo Energia, El-Atf site.
: Nem - B.U. industrial & utility boilers, 7550 al Hengelo, Netherlands (and this course also in 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 Nov. 2012 till now

Employer : ARABIAN BEMCO CONTRACTING CO. LTD

Project : ALQURAYYAH II Combined Cycle Power Station (project C & block #6):

Consists of six power generating Blocks Generate approximately 4000MW, an MSF desalination plant and a water treatment plant (Demin & Remin) and hypo chlorination plant. The Combined Cycle Power Plant (CCPP) will be located on the coast in the Eastern Province of the Kingdom of Saudi Arabia near the existing Qurayyah Thermal Power Plant which is located approximately 100 km south of the Port of Dammam.

- Each power generating block will comprise of 3 GT (GE - 9FA) x 3 HRSG (DOOSAN) x 1 STG (GE).
- Each block of Qurayyah CCPP will have the following major equipment (supplied under Open Cycle Contract A/B):
  - Gas Turbine Generator – GTG (3).
  - GTG Generator Step – Up Transformer (3).
  - Emergency/Black Start Diesel Generator.
- Four EBSDGs for Plant (supplied under Combined Cycle Contract C):
  - Heat Recovery Steam Generator (HRSG) (3).
  - Steam Turbine Generator – STG (1).
  - 100 % HP Turbine Bypass System (for each HRSG) (3).
  - 100 % HR Turbine Bypass System (for each HRSG) (3).
  - 100 % LP Turbine Bypass System (for each HRSG) (3).
  - 3 x 50 % HRSG HP Feed Pumps (for each HRSG) (9).
  - 100 % Deaerator integrated to LP drum (for each HRSG) (3).
  - IP drum (for each HRSG) (3).
  - HP drum (for each HRSG) (3).
  - 3 x 50 % Condensate Extraction Pumps (3).
  - 100 % Water Cooled Surface Type Condenser (1).
  - STG Generator Step – Up Transformer (1).

Job title : Senior Mechanical Commissioning & Start-up Engineer

Job Description :

- BEMCO Representative Senior Comm. Mechanical Engineer responsible for:
  - For DOOSAN HRSG boilers:
    - Plan and monitor all HRSG activities.
    - HRSG erection and equipment installation.
    - HRSG hydrostatic testing.
    - HRSG steam/air blow.
  - 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 GE and its related auxiliaries such as:
    - Lube oil system.
    - Hydraulic oil system.
    - Jacking oil system.
    - Hydrogen filling system for cooling generator.
    - Vacuum system.
    - Condenser.
    - Seal oil system.

- Also commissioning and testing for the following systems:
  - BOP system cleaning (chemical, flush, hydrolase, etc.).
  - BOP system/piping steam/air blow.
  - Coordinate all BOP vendor representative activities.
  - Support all Commissioning Manager, Site and Corporate policies and direction.
  - Coordinate with all other parties (construction, vendor, safety, and quality control, client partners.) to complete the job on time, safely and correctly.
  - Condensate system & condensate pumps.
  - Feed water system (HP/IP) BFP's.
  - Circulating water system & CW pumps.
  - Sump pumps.
- Perform the sequence test for the following systems:
  - Condensate system & condensate pumps.
  - Feed water system (HP/IP) BFP's.
  - Circulating water system & CW pumps.
  - Auxiliary cooling water system.
  - Closed cooling system.
  - Instrument and service air system.
  - Potable water system.
  - Cooling water intake equipment (sluice gate, trash rack & traveling screen).
  - Drum screen wash water pumps.
  - Desalination water pumps.
  - Sea water transfer pumps to hypo plant.
- Report to Project Commissioning Manager.
- Record the commissioning data for all systems mentioned previously.
- Report and advice the daily activities for all systems mentioned previously.

- Also working as 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, firefighting 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 and motorized valves shall be open, etc.
  - Responsible of 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 Dec. 2011 till Oct. 2012
Employer : Ansaldo Energia
Project : 6th October Power Plant - 600MW Simple Cycle
Job title : Mechanical Commissioning, Start-up & Operation Engineer
Job Description : Ansaldo Representative Mechanical Engineer responsible for:

- Commissioning, start-up and operation of Ansaldo gas turbine (4x150MW) (AE94.2) and its related auxiliaries such as:
  - Lubrification & lifting oil system.

- Hydraulic oil system.
- Hydraulic clearance optimization system (HCO).
- Start system architecture (SFC).
- Purging water system.
- Compressor cleaning system.
- Blow off system.
- Intake & GT damper system.
- fuel gas final filtration system.
- Closed cooling system.
- Vibration monitoring system.
- Fire fighting system.
- HVAC system.

Dates : From Apr. 2009 till Nov. 2011

Employer : Middle Delta Electricity Production Company

Project : El-Atf 750MW Combined Cycle

Job title : Commissioning, Start-up & Operation Shift Engineer
(Owner Representative Mechanical Engineer)

Job Description : 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.
- Also 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 advice the daily activities for all systems mentioned previously.
- Also working 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 and motorized valves shall be open, etc.
  - Responsible of 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 Oct. 2005 till Mar. 2009
Project : El-Mahmoudia Power Station
Job title : Operation Shift Engineer
Job Description :

- Conversant with:
  - Unit start-up and shutdown procedures.
  - Monitoring parameters.
  - Testing the equipments.
  - Isolation and de-isolation procedures.
  - Safety work permit system.
- The above mentioned is done for:
  - 8 GE gas turbines 25MW each (MS5001frame P) and its related auxiliaries.
  - 8 NEM HRSG.
  - 2x58MW GE steam turbine and its related auxiliaries.
- And also done for:
  - Condensate system & condensate pumps.
  - Circulating water system & circulation pumps.
  - Feed water system & pumps.
  - Sump pumps.
- I also watch the following maintenance sections for steam turbine GE (58MW) Mark V:
  - Make major inspection.
  - Pumps maintenance and balancing.
  - 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 Oct. 2003 till Sep. 2005
Employer : Misr El-Amria Spinning & Weaving
Job title : Maintenance Engineer
Job Description : 2 years experience in the maintenance and operation of power plants.

Field of experience :

- Gas turbine commissioning, start-up and operation.
- Boiler (HRSG) commissioning, start-up and operation.
- Steam turbine auxiliaries (condenser, vacuum system, tube cleaning system and debris filter) commissioning and start-up.
- Commissioning and start-up for combined cycle auxiliaries such as closed cooling system, Condensate system, feed water system and circulating cooling system.
- Technical ability in the field and in the office.
- Adaptable, with ability to have valuable input to many aspects of a project.
- Excellent mechanical skills and working to strict deadlines within technically demanding environments. Major projects of power plant have includes installation for gas turbine, steam turbine, boilers and related auxiliaries. All aspects of commissioning, start-up and operation for all mechanical equipments (static and dynamic) to be according client contract specification and manufacture requirement. Understanding of P&ID drawing and pipe line installation commissioning, under & above ground piping, pumps and valves.