101034-MEC-MOS-E-2005
TOP Mechanical Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 13 years hands-on experience working in operation, maintenance, commissioning and start-up at several Power Plants. Has experience in GE gas turbines frame MS9001FA (250MW), GE gas turbine frame 9E (125MW), Siemens gas turbine frame V94.3A (250MW), ALSTOM steam turbine, ANSALDO steam turbines, STF HRSG, AC BOILER for HRSG and all BOP systems in combined cycle power plant, also in operation of high, medium and low voltage switchgears & load centers.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	06/10/1981
Gender	:	Male
Marital Status	:	Married
Residence	:	El-Behira

EDUCATION

: B. Sc. in Mechanical Power Engineering, Menoufia University, 2005

LANGUAGES

Arabic	:	Native Language
English	:	Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: Q Basic programming

TRAINING COURSES AND CERTIFICATIONS

: On-shore basic operation training of GE gas turbine (Frame 9FA), Nubaria (from Feb. till Apr. 2009).
: Basic operation training of GE gas turbine (Frame 9FA), GE Energy Products – Europe, Belfort – FRANCE (Jan. 2009):
- Operation of gas turbine.
- Visited Manufactories.
- Auxiliary Equipment control.
- Turbine control system.
- Contracture of units.

: Training course in Nubaria Power Station (1 week), under the direction of operation engineers for GE gas turbine.
: On-shore in Nubaria Power Station (1 week), under the maintenance engineers for SIEMENS gas turbine.

: Operation and maintenance of combined cycle, West Delta Electrical Production Company, Abu Qir (2 weeks in Dec. 2006).

: Another training courses at Nubaria Power Station Site in:
- Service & Instrument Air Compressors.
- Service, raw and closed cooling pumps.
- Fire fighting system.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Feb. 2018 till now

Employer : GE

Project : New West Damietta Power Plant ADD 250MW:

One module consists of:
- Four GE gas turbines 125MW model MS9001E - (DLN2.6) Mark VIe.
- Four DOOSAN horizontal type HRSGs.
- One GE steam turbine (D202) 250MW (HP and LP).
- ACC (Air Cold Condenser).

Job title : TOP Mechanical Engineer

Job Description : TOP responsible for:
- Review System Binders.
- Make System Walk Down with commissioning team.
- Record Punch items.
- Release NOCC after Punch items have category (A & B) was clear.
- Prepare the vendor Documents.
- Clear all Punch items before handed over to the end user.

Dates : From Apr. 2017 till Feb. 2018

Employer : PGESCO

Project : AL SHABAB POWER STATION - PHASE #2:

Consists of two modules, each module consists of:
- Four GE gas turbines 125MW model MS9001E - (DLN2.6), air cooled generators.
- Four AC boiler horizontal type HRSGs.
- One Ansaldo Energia steam turbine 250MW (HP and LP).

Job title : Commissioning Supervisor & Start-up Engineer

Job Description :
- As Commissioning & Start-up Engineer:
  - Flushing for all system (lube oil, CCW, firefighting …etc.).
  - Rotation check & solo run test & alignment and load test for pumps.
  - Review the TOP.
  - Also I can do chemical cleaning for water circuit (ECO, HP, LP, EVA, AD and AE), so chemical cleaning procedure consist of fifth major steps (leak test, flushing must be achieve the flow velocity and turbidity for this phase, degreasing at suitable temp, acid or alkaline phase depend on material, washing phase and passivation by dry air or N2 depend on duration).
  - Steam blow process.
  - First start of turbine and make all start-up tests (first rolling, over speed test, dummy synch, manual synch, auto synch, and load rejection ….etc.).

- As Operation Engineer:
  - Coordination between all contractors to obtain operate the plant at safe mode, economic and stability.
  - Troubleshooting /Analysis for events and alarms to avoid any abnormal case.
  - Open work permit to fix any problems (hot, confined space and operation work permit).
  - Lock out, tag out for all equipment if required.

Dates : From Mar. 2017 till Apr. 2017
Employer : TÜV NORD (Germany)
Project : ATAKA Thermal Power Plant units 3 and 4, 310MW capacity for each
Job Description :

- Proof of performance test and emission of ATAKA Power Plant as a Third Party between MHPSE and EDEPCO.
- Supervision of performance test witch comparison between the equipment behavior (efficiency, emission and heat rate) and guarantee values, this mean the performance test of steam turbine shall be run and stabilized at base load. The tested load will be corrected to the guarantee conditions and then compared to the guaranteed value.
- Preparation for performance test:
  - The test will be conducted by the contractor with cooperation of the owner.
  - Prior to starting the test the contactor will check and verify the equipment and order to ensure that will perform correctly during the test.
  - Checking of the isolation of the system will be made before the performance test.
  - The fuel used for the performance test shall be analyzed during test.
  - There will be one or two hour stabilization period before the test.
- During test I am responsible for:
  - Calibration all equipment's and a data acquisition system of MHPSE was used as well as operational devices.
  - Install all measurement points.
  - Record all readings from DCS, LOCAL and DATA LOGGER device.
  - Fuel sample analysis in official laboratory.
  - Test calculation for efficiency (by direct or indirect methods) and emissions according to Egyptian laws.

Dates : From Feb. 2014 till Dec. 2016
Employer : PGESCO
Project : Giza North Combined Cycle Power Plant (2250MW):
Consists of three modules, each module consists of:

- Two GE gas turbines 250MW model MS9001FA - (DLN2.6), H2 cooled generators.
- Two STF horizontal type HRSGs.
- One Ansaldo Energia steam turbine 250MW (HP, IP and LP).

Job title : Start-up & Operation Engineer
Job Description :

- Commissioning and first start for all pumps, instrument and service compressors.

- Flushing for (LF, lube oil, CCW, firefighting …..etc.).
- Chemical cleaning and steam blow.
- Supervision of all equipment was running.
- Managing on site and following all procedures of cold and hot commissioning.
- Control work permits (PTW) during the plant pre-commissioning, commissioning and testing activities on plant and equipment.
- Follow up CTG, HRSG and STG units operation during reliability, performance test and normal operation.

Dates : From Feb. 2012 till Dec. 2012
Employer : KHARAFI National
Project : DAMIETTA Simple Cycle Power Plant 500MW (4x125MW)
Job title : Commissioning, Start-up & Operation Engineer
Job Description :

- Commissioning and testing for GT.
- Initial gas turbine start-up.
- Operation GT during reliability and performance test.
- 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 Mar. 2010 till Feb. 2012
Employer : KHARAFI National
Project : EL-SHABAB Simple Cycle Power Plant 500MW (8x125MW)
Job title : Commissioning, Start-up & Operation Engineer
Job Description :

- Commissioning and testing for GT.
- Initial gas turbine start-up.
- Operation GT during reliability and performance test.

Dates : From Jun. 2008 till Mar. 2010
Employer : Middle Delta Electricity Production Company (MDEPCO)
Project : Nubaria Combined Cycle Module III (750MW) Power Station:
One module consists of:

- Two General Electric CTG 250MW type MS9001FA.
- Two horizontal STF HRSG (125 bar, 565 ºC, 325 t/hr).
- One Alstom STG 250MW (HP, IP, LP) steam line (650 t/hr).
- 500KV switchyard.
- Medium and Low Voltage Switchgears.

Job title : Maintenance Engineer

Job Description : Combustion Inspection Maintenance (CI), HGP, major inspection and made cycle maintenance.

Dates : From Sep. 2005 till Jun. 2008

Employer : Middle Delta Electricity Production Company (MDEPCO)

Project : Nubaria Combined Cycle Module I & II (2x750MW) Power Station:
Each Module consists of:

- Two SIEMENS combustion gas turbines 250MW type V94.3A.
- Two ALSTOM horizontal type heat recovery steam HRSG.
- One Mitsubishi Steam Turbine (2x250MW).

Job title : Operation Engineer

Field of experience :

- Over 13 years solid experience in different facets of combined cycle Power Plants industry.
- Strong understanding with different philosophies in combined cycle power generations.
- Well-exposed and experienced in the commissioning, start-up and operation operation of the following:
  - Heat Recovery Steam Generators (HRSGs):
    - ❖ Alstom horizontal heat recovery steam generator multi pressures with cold/hot re-heating.
    - ❖ STF horizontal heat recovery steam generator multi pressures with cold/hot re-heating.
    - ❖ DOOSAN vertical type heat recovery steam generator.
    - ❖ AC boilers Ansaldo Caldaie horizontal heat recovery steam generator with HIGH /LOW pressure.
  - Rotating Equipments:
    - ❖ Siemens Gas Turbine (V94.3A 250MW).
    - ❖ GE gas turbine (250 & 125MW frame 9F and 9E).
    - ❖ Mitsubishi steam turbine (250MW).
    - ❖ Mitsubishi thermal plant (310MW).
    - ❖ Pumps (HP/LP feed water, CW, Condensate, closed cooling...).
- Control work permits (PTW) during the plant pre-commissioning, commissioning and testing activities on plant and equipment.
- Carry out the Load Rejection, Reliability and Performance tests within all applicable guidelines.
- Carrying out routine scheduled maintenance work and responding to equipment faults.
- Review maintenance procedures, job plans, standing instruction, operating manuals, and to update COMPANY manuals for safe maintenance and operation.
- Follow up all preventive maintenance for the plant Auxiliaries.
- Operate and monitor all plant system both form the Control room and locally as required, maintaining the unit within all applicable guidelines and regulations including emissions, efficiency, heat rate and safety and carry out minor maintenance on shift when required.
- Maintain a complete set of logs to include all information during normal operation and during operational excursions.
- Conduct plant inspection tours in a professional manner, and ensure that the stations general housekeeping is completed.

- Troubleshoot all plant systems and submit work requests.
- Work side by side with other departments in order to achieve the best result for the company.
- Ability to build and work with multi-cultural and multi-disciplinary staff.
- Seek, organize and exchange information for decision-making and problem solving.
- Work closely with others and provide them with all the necessary support.
- Owner experience.