

105399-MEC-16CGHMOS-E-2003

Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 18 years hands-on experience working in the construction field as well as the maintenance field especially power plant and GIS plant included all related disciplines (i.e. pipelines, pumps, tanks, compressors, Gas turbines, transformers, ...etc.).

PERSONAL DATA

Nationality : Egyptian
Birth Date : 30/08/1980
Gender : Male
Marital Status : Married
Residence : Mansoura

EDUCATION

: B. Sc. in Mechanical Power Engineering, Mansoura University, 2003

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

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

TRAINING COURSES AND CERTIFICATIONS

- : English: translation and conversation level (302), AUC (Jan. 2004).
- : Power Plant: combined cycle operation, EDEPC (Apr. 2005).
- : Inspections for gas turbines, Siemens made V.94.A3, SIEMENS – Berlin, Germany (Jan. 2006).
- : PTW Issuance for the mechanical work, SEC/ISD - Eastern Region (Mar. 2010).
- : PTW Issuance for the GIS limitation up to 380KV, SEC National Grid, Dammam (Apr. 2016).
- : Welding NDT (UT - PT - MT - RT), Level 2, GAC Consulting, Egypt (Apr. 2018).
- : Hydraulic System Design and Maintenance, CAMTECH (Sep. 2021).
- : Project Management Professional, PM Tricks (Dec. 2021).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jan. 2018 till now
- Employer** : Middle Delta Electricity Production Co. (MDEPC), Egypt
- Project** : TALKHA Power Plant 750MW:
- 2x250MW Gas turbines (SIEMENS made, Frame 4000 F).
 - BOP systems (pump house - Demin. Water production plant - cooling water system - Distillate fuel system and storage tanks - emergency diesel generator - instrument and service air compressor - firefighting systems - chlorination injection system for the pump house suction water).
 - 2 HRSG's, CMI made.
 - 1x250MW steam turbine, ALSTOM made.
 - DCS as a main control system, EMERSON.
- Job title** : Mechanical Maintenance Engineer for Gas turbine and its auxiliaries (Siemens made, 4000 F)
- Job Description** :
- Carrying out the trouble shooting for rotating machines (Air compressors, Pumps, Diesel engine and gas turbines).
 - Performing the periodic and preventive maintenance for the Gas Turbine and its auxiliaries (SIEMENS made).
 - Performing the periodic and preventive maintenance for all BOP systems.
 - Performing the weekly test of firefighting systems (water deluge systems and fire water pump set).
 - Performing the combustion chamber inspection for gas turbine (SIEMENS made).
 - Spare parts inspection and turn over from the vendors for the gas turbine and its auxiliaries.
 - Preparing the plant consumable requirements chart (Fuel oil - lubricants - compressor wash agent -etc.).
 - Performing all the required inspections for the Gas Turbine Frame 4000F according to SIEMENS recommendation (Minor Inspection for combustion chamber - Major Inspection for all gas turbine set).
 - Scope of work and major activities for the Major Inspection:
 - Dismantling of all turbine casing.
 - Lift up the turbine rotor including all disks (compressor side - Turbine side).
 - Dismantling the compressor vanes carrier and the turbine vanes carrier and replacements all parts with new one.
 - Dismantling all rotor disks and replacement of all blades with new one.
 - Replacement all heat shields for the combustion chamber with new one.
 - Measuring all required clearances (radial - axial).
 - Assembly of all main components after finalizing the refurbishment.
 - Full tightness of all casing bots by high torque and high tension special tools.
- Dates** : From Jun. 2017 till Dec. 2017
- Employer** : Al Toukhi Co. for trading, industry and contracting (KSA)
- Project** : AL JILLAH Substation (380KV)

Job title : Site Manager

Job Description :

- Confer with project staff to outline work plan and to assign duties, responsibilities, and scope of authority.
- Direct and coordinate activities of project personnel to ensure project progresses on schedule.
- Preparing project progress reports for management and client.
- Conduct site inspections and field measurements.
- Prepare cost projections and budget estimations for construction sites.
- Maintain relationships with contractors and vendors.
- Review approve, and monitor construction schedule provided by contractor.
- Oversee construction to assure detailed conformance with the contract documents and highest quality workmanship.
- Responsible for record keeping activities, such as, financial tracking and field reports.
- Oversee the Implementation of the commissioning activities 3 weeks ahead schedule.
- Responsible for the adherence to operating standards, the development of supervisory goals & objectives, and the management of labor hours and disposal expenses.
- Implement and maintains and effective loss control and safety program.
- Work with Project Manager and other department Managers to ensure the long term success of the division.
- Approve expenses and manages the budget for the operations department including approval of purchase orders and vendor pricing.
- Oversee and support a good working relationship between management and employees.
- Technical Core Competencies:
 - 380KV GIS (ABB), one breaker and half bay design (7 bays) including the GIP connections and related SF6 gas activities.
 - 132KV GIS (HHI), Double bus single breaker design, 24 Bays including the HV XLPE cable installation activities (pulling - support and cable clit installation - cable termination).
 - 33KV SWG (racked breaker), 3 Busses including the HV cable installation activities (pulling - support and cable clit installation - cable termination).
 - 502 MVA oil filled 380KV/132KV transformers (ABB) including the oil filling activities.
 - 67 MVA oil filled 132 KV/33KV transformers including the oil filling activities.
 - Installation of the control & power panels (panel fixing - cable pulling, gland and termination).
 - Installation of the Fire Fighting systems (FM200 - HP CO2 - Fire water pump sets - Fire water network - fire alarm).
 - Installation of the HVAC system (PACU - ventilation fans - duct work).

Dates : From Oct. 2013 till Jun. 2017

Employer : Al Toukhi Co. for trading, industry and contracting (KSA)

Project : AL OMRAN BSP Substation (380KV)

Job title : Site Manager

- Job Description** :
- Confer with project staff to outline work plan and to assign duties, responsibilities, and scope of authority.
 - Direct and coordinate activities of project personnel to ensure project progresses on schedule.
 - Preparing project progress reports for management and client.
 - Conduct site inspections and field measurements.
 - Prepare cost projections and budget estimations for construction sites.
 - Maintain relationships with contractors and vendors.
 - Review approve, and monitor construction schedule provided by contractor.
 - Oversee construction to assure detailed conformance with the contract documents and highest quality workmanship.
 - Responsible for record keeping activities, such as financial tracking and field reports.
 - Responsible for the adherence to operating standards, the development of supervisory goals & objectives, and the management of labor hours and disposal expenses.
 - Implement and maintains and effective loss control and safety program.
 - Oversee the Implementation of the commissioning activities 3 weeks ahead schedule.
 - Work with Project Manager and other department Managers to ensure the long term success of the division.
 - Approve expenses and manages the budget for the operations department including approval of purchase orders and vendor pricing.
 - Oversee and support a good working relationship between management and employees.
 - Technical Core Competencies:
Well knowledge and excellent capacity with the installation of the following systems:
 - 380KV GIS (ABB), one breaker and half bay design (5 bays) including the GIP connections and related SF6 gas activities.
 - 115KV GIS (HHI), Double bus single breaker design, 27 Bays including the HV XLPE cable installation activities (pulling - support and cable clit installation - cable termination).
 - 13.8KV SWG (racked breaker), 3 Busses including the HV cable installation activities (pulling - support and cable clit installation - cable termination).
 - 502 MVA oil filled 380KV/115KV transformers (ABB) including the oil filling activities.
 - 67 MVA oil filled 115KV/13.8KV transformers) including the oil filling activities.
 - Installation of the control & power panels (panel fixing - cable pulling, gland and termination).
 - Installation of direct buried HV cables (6 Nos., 115KV) for the outgoing circuits i.e. cable pulling - cable joints - link box installation.
 - Installation of the Fire Fighting systems (FM200 - HP CO2 - Fire water pump sets - Fire water network - fire alarm).
 - Installation of the HVAC system (PACU - ventilation fans - duct work).

Dates : From Jan. 2013 till Oct. 2013
Employer : Al Toukhi Co. for trading, industry and contracting (KSA)
Project : Sharuora Power Plant Extension Project
Job title : Mechanical Lead Engineer
Job Description :

- Preparing the weekly work plan for site mechanical activities.
- Conduct site inspections and field measurements for the delivered material and the work activities.
- Preparing the monthly manpower and equipments chart for the site activities requirements.
- Preparing the manpower qualifications report (specially the rental manpower).
- Preparing the bill of material & tools for all mechanical activities.
- Managing the subcontractor for the mechanical activities at the site.
- Preparing the FCN (field change notice) for any required deviation from the design drawings.
- Oversee the Implementation of the commissioning activities 3 weeks ahead schedule.
- Supervising all start-up activities for the BOP systems and gas turbines.
- Acting the Site Manager responsibilities in case of leaves for the Site Manager.
- Technical Core Competencies:
 Well knowledge and excellent capacity with the installation, testing & commissioning of the following mechanical systems:
 - The GT frame 7 EA and all related auxiliaries (exhaust fans - exhaust stack - air filter house - water wash system - fuel selection skid).
 - The fuel treatment system equipment WEA made (fuel forwarding skid - fuel transfer skid - fuel unloading skid - fuel purification skid - Air compressors unit).
 - The fabrication and installation of the fuel storage tanks (3x15000 cup. Meter) floating roof type:
 - ❖ Supervision for the tank assembly and fabrication (welding work).
 - ❖ Witness the RT for the welding joint and film enterprising.
 - ❖ Conduct all required tests and inspection with the consultant (i.e. leak test - hydro test for settlement verification).
 - ❖ Supervision the sand blasting operation prior to the painting work.
 - ❖ Supervision the painting work and DFT.
 - Piping fabrication and installation for site service.
 - Firefighting system for all site equipment's (fire water deluge - foam water spray - FM200 - fire water main line grooved connection).
 - HVAC system (AC central units for electrical building - AH unit for machine halls and GT hall - blowers and fans).

Dates : From Apr. 2011 till Jan. 2013
Employer : Al Toukhi Co. for trading, industry and contracting (KSA)
Project : FARAS Construction Project
Job title : Site Manager

Job Description :

- Confer with project staff to outline work plan and to assign duties, responsibilities, and scope of authority.
- Direct and coordinate activities of project personnel to ensure project progresses on schedule.
- Preparing project progress reports for management and client.
- Conduct site inspections and field measurements.
- Prepare cost projections and budget estimations for construction sites.
- Maintain relationships with contractors and vendors.
- Review approve, and monitor construction schedule provided by contractor.
- Oversee construction to assure detailed conformance with the contract documents and highest quality workmanship.
- Responsible for record keeping activities, such as, financial tracking and field reports.
- Responsible for the adherence to operating standards, the development of supervisory goals & objectives, and the management of labor hours and disposal expenses.
- Implement and maintains and effective loss control and safety program.
- Work with Project Manager and other department Managers to ensure the long term success of the division.
- Approve expenses and manages the budget for the operations department including approval of purchase orders and vendor pricing.
- Oversee and support a good working relationship between management and employees.

Dates : From Nov. 2007 till Apr. 2011
Employer : Al Toukhi Co. for trading, industry and contracting (KSA)
Project : FARAS PP Construction Project
Job title : Site Mechanical Engineer
Job Description :

- Installation of the Gas Turbine (GE Frame 7 FA) an all related accessories.
- Assembly and Installation of Exhaust stack for the gas turbine.
- Assembly and Installation of the air intake filter house and the related steel structure for gas turbine.
- Installation and testing for the all piping systems related to the gas turbine (fuel gas - closed cooling - instrument air - CO2 purging).
- Installation of the fuel gas supply system (scrubber - Filter - oil bath heater).

Dates : From Nov. 2005 till Nov. 2007
Employer : Middle Delta Electricity Production Co. (MDEPC)
Project : 750MW Talkha Power Plant:

- 2x250MW Gas turbines (SEIMENS made V94 3A 2).
- BOP systems (pump house Demin. Water production plant - cooling water system - Distillate fuel system and storage tanks - emergency diesel generator - instrument and service air compressor - firefighting systems - chlorination injection system for the pump house suction water).
- 2 HRSG's, CMI made.
- 1x250MW steam turbine, ALSTOM made.

Job title : DCS as a main control system, EMERSON.

Job Description : Principle Engineer for Gas turbine and its auxiliaries (Siemens made)

- Following up for all construction daily activities of Gas turbine and its auxiliaries as owner representative with the EPC contractor (SIEMENS).
- Following up for all construction activities for all BOP systems as owner representative with the EPC contractor (SIEMENS).
- Conducting the site inspection for the installation activities and delivered material representing the owner.
- Testing and commissioning for the distillate oil tanks (2 x 30,000 cubic meter) as per API 650.
- Start-up and commissioning witness for the Gas turbine and its auxiliaries (SIEMENS made).
- Carrying out the trouble shooting for rotating machines (Air compressors, Pumps, Diesel engine and gas turbines).
- Performing the periodic and preventive maintenance for the Gas Turbine and its auxiliaries (SIEMENS made).
- Performing the periodic and preventive maintenance for all BOP systems.
- Performing the weekly test of firefighting systems (water deluge systems and fire water pump set).
- Performing the combustion chamber inspection for gas turbine (SIEMENS made).
- Spare parts inspection and turn over from the vendors for the gas turbine and its auxiliaries.
- Preparing the plant consumable requirements chart (Fuel oil - lubricants - compressor wash agent ...etc.).
- Following up the construction of distillate oil storage tanks (owner representative).

Dates : From Mar. 2004 till Nov. 2005

Employer : East Delta Electricity Production Co. (EDEPC)

Project : Combined Cycle Power Plant (GE made frame 5)

Job title : Shift Engineer

Job Description :

- Operation and preparing damages report for the following equipments:
 - 8/25MW - 5001 Gas Turbines (Frame 5 GE Made) controlled by Speed Tronic Mark II and its Auxiliaries.
 - 220KV Electrical Switchyard Have 4x56MVA (11.5/220KV) power Transformers plus 2x50 MVA (11.5/220KV) Steam Generator Transformers.
 - 8 HRSG (Vogt Co. made) 54 ton/hr, 52 bar DMC Controlled & Feed Water Pumps (250hp, 82bar).
 - 2x50MW Steam Turbine Speedtronic Mark III (GE made).
 - 3.3KV Switchgear and Auxiliary Transformers (1.2MVA 11.2KV/400V).
 - Pump house (2 Nos. CCWP, 670hp and 11200ton/hr).
- Performing the isolation procedure for the mechanical and electrical equipments prior to maintenance work.
- Coordination with the national grid dispatcher incase of any emergency such as increasing and decreasing the plant loads, forced shutdown for the units or any fault for the switch yard protection panels.
- Performing the switch yard limitation under dispatcher supervision.

- Preparing the weekly and monthly reports for the plant major systems including the consumable requirements (fuel - lubricants ...etc.).