

105344-MEC-1OQS-E-2009
Mechanical Commissioning & Start-up Engineer

Holds a B. Sc. in Mechanical Engineering and has about 12 years hands-on experience working in operation, commissioning and start-up at Power Plants.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 26/07/1984
Gender : Male
Residence : Alexandria

EDUCATION

: B. Sc. in Mechanical Engineering, Alexandria University, 2009

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : NDT-Magnetic Testing Level II, Certified from Eng. Maher A. El Atty (ASNT ID. 178571), Egyptian Welding Academy (EWA).
- : NDT-Liquid Penetrant Testing Level II, Certified from Eng. Maher A. El Atty (ASNT ID. 178571), Egyptian Welding Academy (EWA).
- : Welding Technology and Metallurgy, Certified from Egyptian Welding Academy (EWA).
- : Selection of Engineering Materials, Certified from Egyptian Welding Academy (EWA).
- : Ansaldo Steam Turbine Operation and Maintenance on-job training, Certified from Ansaldo Training School (May 2010).
- : Travelling Water Screen Operation and Maintenance, Certified from Tarnos Filtration.
- : HP/IP Feed Water Pumps, LP Feed Water Pumps, Circulating Water Pumps, Condensate and Service Water Pumps, Certified from Ebara Corporation, Fluid Machinery & Systems Company, and Custom Pumps Division (May and Dec. 2010).
- : Mechanical Operation and Maintenance, WDEPC, Training Center (Mar. 2010).

: Common faults of Combined power station, WDEPC, Training Center (15 days).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Mar. 2021 till Dec. 2021
Employer : METKA
Project : Bridge Power Project in Ghana
(5 x GE Gas Turbine 25MW (TM2500), 5 OTB (CMI), ST GE (70MW))
Job title : Mechanical Commissioning & Start-up Engineer
Job Description : Carrying out HRSG cold commissioning and hot commissioning as the following:

- Checking the completing of erection works and issuing punch items list then following the installation team to close these items.
- Supporting and following chemical cleaning activities priory and reconfiguration post chemical cleaning.
- Carry out walk down with all disciplines officially and raise punch items to release commissioning to start.
- I&C Loop checks and valves adjusting as cold commissioning activities.
- Carry out all boiler Pumps and motors solo run and heat run tests.
- Hanger supports cold setting adjusting and hot setting checking during boiler running.
- Safety valves reconfiguration post chemical cleaning and hydro test activities then POP up testing.
- HRSGs line up and initial filling and initial firing.
- Start-up / shut down sequence checking as per manufacture instructions.
- Trouble shooting supporting and maintenance program making as per vendors recommendations.
- Documents making and turn over all packages to client.

Dates : From Oct. 2015 till Mar. 2021
Employer : WDEPC
Project : Sidi Krir Combined Power Plant (750MW)
Job title : Operation Engineer / Site Engineer
Job Description :

- Carry out all the required O&M activities as per manufacture recommendation.
- Assist Gas Turbine operation personnel on daily basis to achieve the optimum operating conditions for the Gas Turbines and keep the power station in the highest available Level of performance and operating conditions.
- Responsible for the operation of module:
 - Two Mitsubishi CTG 250MW type.
 - Two horizontal NEM multi pressure HRSGs.
 - One Ansaldo STG 250MW multi pressure (HP, IP, LP).
- Assist the commissioning and start-up of two Mitsubishi CTGs 250MW.
- Assist the commissioning and start-up of two horizontal HRSGs.
- Assist the commissioning and start-up of one Ansaldo STGs 250MW.
- Safe operation for GTG Mitsubishi 250MW * 2 UNIT and all auxiliaries during the reliability period.

- Energizing of 500KV switchyard.
- Switchgear 6.3KV and MCC 400 v for all plant auxiliaries.
- Responsible for daily report.

Dates : From Mar. 2015 till Sep. 2015
Employer : PSP Elsewedy
Project : Mahmoudia Power Plant (2 Ansaldo Gas Turbines (AE94.2))
Job title : Mechanical Commissioning & Start-up Engineer
Job Description :

- Following & supervising installation, pre-commissioning & commissioning test of 2 gas turbines – including lube oil system, hydraulic oil system, purging water washing system gas system.
- Following and supervising installation, pre-commissioning & commissioning of 2 Ansaldo gas turbines, power generators & it's Auxiliaries.

Dates : From Oct. 2010 till Mar. 2015
Employer : WDEPC
Project : Sidi Krir Combined Power Plant (750MW)
Job title : Operation Engineer / Site Engineer
Job Description :

- Carry out all the required O&M activities as per manufacture recommendation.
- Assist Gas Turbine operation personnel on daily basis to achieve the optimum operating conditions for the Gas Turbines and keep the power station in the highest available Level of performance and operating conditions.
- Responsible for the operation of module:
 - Two Mitsubishi CTG 250MW type.
 - Two horizontal NEM multi pressure HRSGs.
 - One Ansaldo STG 250MW multi pressure (HP, IP, LP).
- Assist the commissioning and start-up of two Mitsubishi CTGs 250MW.
- Assist the commissioning and start-up of two horizontal HRSGs.
- Assist the commissioning and start-up of one Ansaldo STGs 250MW.
- Safe operation for GTG Mitsubishi 250MW * 2 UNIT and all auxiliaries during the reliability period.
- Energizing of 500KV switchyard.
- Switchgear 6.3KV and MCC 400 v for all plant auxiliaries.
- Responsible for daily report.

Dates : From Feb. 2010 till Oct. 2010
Employer : WDEPC
Project : Sidi Krir Combined Power Plant (750MW)
(2 Mitsubishi Gas Turbines (M701F-250MW), 3 Atlas Copco Gas Compressors, 2 Nem Heat Recovery Steam Generator, 1 Ansaldo Energia Steam Turbine, Toshiba main contractor for Auxiliaries, Yokogawa DCS System & Schneider Switchgear)
Job title : Mechanical Commissioning & Process Engineer
Job Description :

- Following and supervising installation, pre-commissioning and commissioning tests of 3 Atlas Copco Gas Compressors including: trial tests and runs, Surge Region Setups for each compressor and

Compatibility with Gas turbine demands and abnormalities.

- Following and supervising installation, pre-commissioning and commissioning tests of 2 Mitsubishi M701F Gas turbines, Power Generators and its auxiliaries including: trial tests, simulation and interlock tests, trial run ups, load rejection tests, load runback tests, trip tests and house load test and that's for Gas and Oil Firing.
- Following and supervising installation, pre-commissioning and commissioning tests of 2 Nem's Heat Recovery Steam Generators including doing steam blowing of main steam lines.
- Following and supervising installation, pre-commissioning and commissioning tests of Ansaldo Energia Steam Turbine, Power Generator, Steam Condenser and Steam Bypasses and its auxiliaries including: trial run up, online and offline tests, simulation tests, load rejection tests, load runback tests and trip tests.
- Following and supervising installation, flushing, pre-commissioning and commissioning tests of main plant auxiliaries' systems: Service water system, Circulating water system, Vacuum System, Condensate System, Closed Cooling System, Compressed Air System, Service Gas System, Fuel Oil System and filling System.
- Worked as a Process Engineer in reviewing and modification of plant logic with instrumentation and control department to achieve maximum compatibility of plant logic.
- Reporting any new activities on site, following commissioning tests, coordinating with several contractors to achieve minimum time with maximum progress step by step with project consultant (PGESCo.).

- Field of experience :**
- 12 years solid experience in different facets of combined cycle Power Plants industry.
 - Strong understanding with different EPC philosophies in combined cycle power generations.
 - Well-exposed and experienced in the commissioning, start-up, operation of the following:
 - Heat Recovery Steam Generators (HRSGs):
 - ❖ NEM horizontal heat recovery steam generator multi pressures with cold/hot reheating.
 - ❖ CMI horizontal heat recovery steam generator one through boiler.
 - ❖ AC boilers S.P.A formerly Ansaldo Caldaie horizontal heat recovery steam generator multi pressure with cold/hot reheating.
 - Rotating Equipments:
 - ❖ GE gas turbine (25MW TM2500).
 - ❖ Ansaldo steam turbine (250MW).
 - ❖ Mitsubishi gas turbine (250MW M701F).
 - ❖ Pumps (HP/LP feed water, Circulate water, Condensate water, SW, CCW...).
 - Possess strong leadership and dynamic interface in a team environment and working with others to achieve the best possible output from all functional viewpoints.
 - Actively display initiative in the development and modification of existing design with the responsibility for meeting customer requirements and company internal requirements for mechanical scope.

- Support the technical development of the Mechanical Engineering and Design functions through the evaluation and introduction of new design and analysis capabilities.
- Demonstrated ability to work independently or to lead a team to complete commissioning within required time frames.
- Demonstrated abilities and passion for providing technical advice to staff members and embracing a culture that values team work.
- Job workforce motivator and able to maintain a continued positive mindset during difficult project scenarios.
- Analyze and recommend design concepts to meet customer requirements and evaluate design approaches for specification compliance.
- Review, negotiate and accept mechanical portions of project specifications received from owner during commissioning activities.
- Perform and document mechanical analysis of assigned designs and assure that customer requirements are met.
- Assure that standard mechanical engineering practices are complied with on assigned projects.
- Develop qualification plan and perform qualification testing to assure that new designs, materials and process meet the intended requirements when implemented.
- Evaluate vendor capabilities and vendor material. Participate in the hiring, training and development, of new Mechanical Engineers and Mechanical Designers.
- Determination of cause and origin of industrial incidents, investigations of incidents.
- Preparation of oral and written reports, proposals and schedules.
- Actively participate in the Commissioning and Start-up Phase of the units and systems.