

100048-MEC-OS-E-1998
Commissioning, Start-up & Operation Manager

Holds a B. Sc. in Mechanical Power Engineering and has more than 17 years hands-on experience working in the Thermal & Combined Cycle Power Plants for Power Generation or Oil & Gas Projects.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 01/09/1975
Gender : Male
Marital Status : Married
Residence : Qalubia

EDUCATION

: B. Sc. in Mechanical Power Engineering, Higher Technological Institute in 10th of Ramadan City, 1998

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: AutoCAD
: Programming language of BASIC

TRAINING COURSES AND CERTIFICATIONS

- : Steam Turbine Systems Maintenance and Operation on-site by Siemens (one month).
- : Gas Turbine Basic Operation & Mechanical Maintenance on-site Training from Siemens Power Academy - Energy Solutions.
- : Boiler Systems Maintenance and Operation on-site by training department in Ayoun Moussa Power Plant (one month).
- : Balance of Plant (BOP) Systems Maintenance and Operation on-site by Skoda (one month).
- : HVAC System including Direct Expansion Units (DX), Chillers WTR system & Fans in The International Air Conditioning (Philco) Company (3 months).
- : English course from The Ministry of Electricity in Leadership Development Center (LDC) in Cairo (one month).
- : Energy Bechtel Power Course in Shoubra El-Kheima Steam Power Plant (4x315MW) (3 months).

- : Benzin & Diesel Engines course include overall maintenance and general car maintenance in workshop of Egyptian International Motors Company (3 months).
- : Training course in Hydrogen Sulfide Gas (H₂S) from International Safety Training Center in Mellitah Gas Plant, Libya (one week).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2011 till now
- Employer** : Saudi Services for Electro Mechanical Works Co.
- Projects** :
- Al-Qurayat Power Plant Extension III Project (2x80-100MW) – Siemens Gas Turbines (V84.2) and DCS (from May 2015 till now)
 - Ras Al-Khair Water Transmission Project (from Jun. 2014 till Apr. 2015)
 - Rafha Power Plant Project (from Dec. 2012 till May 2014):
 - Portion I: Build Gas Turbine (2x80-100MW) Siemens Gas Turbines (V84.2) and Emerson for DCS
 - Portion II: Relocate GE units (2x30MW - MARK VI TMR - FRAME B)
 - Al-Qurayat Power Plant, Gas Turbine Project (2x80-100MW) - Siemens Gas Turbines (V84.2) and DCS (from Jun. 2011 till Nov. 2012)
- Job title** : Commissioning, Start-up & Operation Manager
- Job Description** :
- Ensure that all systems are completed, handed over fully commissioned, and ready to start-up / operate as per requirements from the Owner (Saudi Electricity Company (SEC)) and according to Project Technical Specification, other responsibilities also include:
- Provide guidance and leadership with expertise on all matters relating to mechanical completion, commissioning, and turnover/systems acceptance.
 - Liaise & coordinate with Head Office design engineering to solve all related problems.
 - Development of plans and interfaces to ensure a safe and effective field completion phase and transition of systems to steady state operations, to be able to start-up / operate the equipments and systems.
 - Develop the commissioning management procedures, systems acceptance procedures including work permits (PTW), turnover and completions packages (TCPs).
 - Perform the complete training for company staff in the unit operation basis, with documentation for smoothly working processes.
 - Handover planning and execution procedures, commissioning procedures, processes.
 - Verifying that commissioning activities are thoroughly implemented and safely staffed.
 - Execute commissioning and initial operation for Siemens Units with units auxiliaries.
 - Coordinate the work and interacts with other leaders at all levels of the organization, including higher management to keep the plant operating at an optimum level to provide reliable electrical service using the most efficient methods available.
 - Improve the skills and leadership abilities by select/making good staff people skills to accomplish these duties and make motivates people to work as a team to follow the system regulations.

- Supervise and coordinate the activities of production and operating workers and ensures that all safety and operation sequence procedures are followed by employees.
- Designing maintenance programs and implementing preventative maintenance programs.

Dates : From Jan. 2009 till Oct. 2010

Employer : Bechtel Co. & Power Generation Engineering & Service Co. (PGESCO) Consultant Consortium

Project : EI-Atf Combined Cycle Project 2x250MW+250MW (Joule-Brayton+Rankine cycle or COGAS) Mitsubishi Gas turbine-M701F, Ansaldo Energia Steam Turbine, Nem Co. for HRSG's, Yokogawa Co. for DCS in Egypt

Job title : Senior Mechanical Consultant Commissioning & Start-up Engineer

Job Description :

- Coordinate work activities between contractors-owner to ensure the work is performed in accordance with contract requirements & prepare in detailed & accurate contractor daily activity reports.
- Implement project commissioning quality control/assurance requirements to develop company performance by inspection and witness testing with contractor's in-process and ensure the latest design documents and P&ID drawings are being used.
- Performing initial systems walk down with provide the request information & technical guidance to contractors & develops methods & solutions to verification of integrated system testing & fine tuning for systems and plant operations.
- Share & cooperate studing the data & project troubles with all other engineering departments to issue any modification as required according to specification data sheets or standard to verify project success with its target schedule.
- Issue and sign the mechanical work permits (WP).
- Verify contractor's progress prior to issuance turn over acceptance certificate (TOAC).
- Prepare contractor surveillance notices to equipment non-conforming conditions as required & changes notices & develop punch lists of incomplete work.
- Be a role model for safety philosophy & safety management program in the Consultant Consortium "Zero Incident".
- Review & following the chemical cleaning & commissioning procedures & activities for the Balancing of Plant (BOP) & for 2 Heat Recovery Steam Generator (HRSG) vertical type produce 540 t/h of superheated steam at 130 Bar & 560 °C, (Triple pressure + Reheat Natural circulation from NEM Co.) & Supervisor Engineer for Steam Blow Technique.
- This include mechanical responsibility for all pre-commissioning & commissioning activities for the Gas Turbine units 1 & 2 include: spin test, first fire and firing adjustment, no load test, dummy synchronize, over speed test, vibration adjustment, (25-50-75-100%) load operation test, load swing test, runback test, load rejection test (25-50-75-100%) house load operation test, on-off line blade wash, CO2 Discharge test, performance test, reliability test.

Dates : From Sep. 2007 till Nov. 2008
Employer : Bonatti-Dietsmann Consortium, Libyan Branch
Project : Mellitah Gas Plant, Libya
Job title : DCS Boiler Board Operator in control room for Utility Area
Job Description : Responsible for the Safe cold, warm & hot Start-up & Shutdown for the units & normal operation include change over the equipment with monitoring & reporting equipment & systems conditions during normal & abnormal cases for steam Turbine by Nuovo Pignone (3x25MW) & 4 Steam Boilers, each rated is 330 t/hr of superheated steam at 355±5 °C, 41bar (g) by Macchi S.p.A.).

Dates : From Jan. 2004 till Sep. 2007
Employer : Initec Energia (Grupo Dragados, Spanish Co.) & Alstom Power Egypt & Power Generation AG Consortium

Projects :

- Cairo North Power Plant Module II Combined Cycle Project (2x250 + 250MW - General Electric (GE Mark VI) Gas turbine, Alstom Steam Turbine, NEM Co. for (HRSG & DCS) (from Feb. 2007 till Sep. 2007)
- Nubaria Power Station I & II Combined Cycle Project (4x250 + 2x250MW - Siemens (V94.3A) Gas Turbine, Mitsubishi Steam turbine, Alstom for HRSG & DCS) (from Mar. 2005 till Feb. 2007)
- Cairo North Power Plant Module I Combined Cycle Project (2x250 + 250MW - Mitsubishi Gas turbine, Hitachi Steam Turbine, NEM Co. for HRSG, Foxboro Co. for DCS (from Jan. 2004 till Mar. 2005)

Job title : Commissioning Start-Up & Troubleshooting Engineer

Job Description : Perform all commissioning & start-up activities including the procedures for the Balancing of Plant (BOP) and get the owner acceptance approved certificates in the following duties (as example):

- Flushing, blow out, hydro-test, chemical cleaning for all the piping systems.
- Purging gas fuel Lines & commissioning solar oil fuel including fuel treatment systems.
- Commissioning/Start-up huge pumps like a feed water pump includes HP/IP & LP water pumps, including the complete balancing of Plant (BOP) systems for CTG & STG units: like circulating water - Condensate water - closed cooling - service water - demineralized Water - traveling water with wash - trash rack – dredge - service gas - raw/potable water, taprogge (tube cleaning & debris filter) systems...etc.
- Commissioning/Start-up the Hydrogen/Oxygen generation plant which produces Service Gas for the turbine Generator use including all accessories (Rectifier - Separation cells - Gas Holders - Compressors...) from Stuart Energy.
- Commissioning/Start-up firefighting systems includes main electrical - diesel & jocky pumps, deluge valves & Sprinkler System, CO2 Suppression system, wet & dray pipes systems, Foam Suppression System for fuel oil tanks.
- Commissioning/Start-up HVAC System including Direct Expansion Units (DX), Chillers WTR system & Fans.
- Commissioning/Start-up Compressed Air system, including reciprocating, rotary screw, centrifugal and axial-flow Compressor from CompAir & Atlas Copco.

- Implementation & proceed the chemical cleaning procedures for (BOP) & HRSG's.
- Supervising the steam blow activities/technique in all modules of combined cycle projects & following the required Safety precaution during all commissioning activities.
- Trainer for the client engineers in all mechanical equipments & troubleshooting activities related to all systems in (BOP) scope.
- Handover all commissioning documentation & required certificates for systems according to the codes and specification till (TOAC).
- Work within company policies and quality procedures regard to Healthy, Safety and Environment to ensure their succeeding.
- Responsible Warranty & Maintenance Engineer in Warranty period.

Dates : From Sep. 1999 till Jan. 2004

Employer : East Delta Electricity Production Co. (EDEPC)

Project : Ayoun Moussa Thermal Power Plant
(2x320MW, gas/oil fired natural circulation by Siemens Steam Turbine - Babcock & Wilcox for Steam Boilers & Bailey for DCS, each rated at 1053 t/hr of superheated steam at 538 °C, 168 bar)

Job title : Shift Charge Engineer

Job Description :

- Responsible for the Safe cold, warm & hot Start-up & Shutdown the units & normal operation include change over the equipment with monitoring & reporting equipment & systems conditions during normal & abnormal cases with coordination between the plant and "Load Dispatch Center" National Electricity Control Center (NECC) to keep stability of plant and power grid, and coordinate between local operators and unit operators with training for the new operators.
- Following up the erection and constriction.
- Commissioning and start-up for both two units and follow up tests like (MCR, UGL, Run back, Run dawn, housing load, ...).
- Knowledge with Generators/grid including all transformers, breakers and batteries UPS system. operation, also Electrical Maneuvers in the Switchyard 500/220KV & Substation GIS (Geographic information systems) & Switchgear 6.3KV & motor control center (MCC) include connecting and disconnecting circuits, isolating of bus bars, changeovers.
- Issue & preparation Work Permits & log out-tag out (LOTO) including revising working cautions, dangers analysis and safety cautions & prepare shift instructions as required.
- Start-up and synchronization of two units with shutdown in safe operation.
- Follow up of the Turbines during Performance and Reliability Tests.
- Operate Multi Stage Flushing (MSF) System in Desalination Unit.
- DCS Engineer Board Operator in Control Room:
 - As a Balance of Plant (BOP) Board Operator.
 - As a Turbine Board Operator.
 - As a Boiler Board Operator, after that I was worked as a Unit Operator then as a Shift Engineer.

Dates : From Aug. 1998 till Sep. 1999

Employer : Skoda - Kahromika Consortium

Project : Ayoun Moussa Thermal Power Plant natural circulation (Open Rankine Cycle), 2x320MW, gas/oil fired by Siemens Steam Turbine - Babcock & Wilcox for Steam Boilers & Bailey for DCS) each rated at 1053 t/hr of superheated steam at 538 °C, 168 bar

Job title : Technical Office & Erection Piping Engineer

Job Description :

- Prepare & arrange pipe drawing, pipe supports, and follow up the material list.
- Fabrication & erection Non Critical piping (Small bore, large bore) & its supports.
- Follow up the erection completion related to the various systems punch list.

Field of experience :

- Knowledge and experience with all rotating equipment, performance & testing including the steam & combined units cycle & troubleshooting.
- Familiar with protection trips for thermal & combined cycle units and able to controlling operations of equipment or systems.
- Professional Commissioning/Start-up Engineer for power plant activities with troubleshooting experience and can solving any problems.
- Good knowledge with API / ANSI / ASME standards and P&ID/process drawing and technical specifications.
- Knowledge of pre-commissioning procedures such as blowing, flushing, chemical cleaning, steam blowing, equipment alignment, etc.
- Maintenance and overhauling of boiler feed water pumps (turbine driven & motor driven).
- Maintenance and overhauling different types of valves (globe, gate, butterfly, ball, etc.) used in power plants.
- Knowledge of power plant operation (start-up, synchronization, normal shutdown for: Steam or Gas Turbines, Boilers, BOP, can assist or lead DCS operators in control Room.