

Holds a B. Sc. in Mechanical Power Engineering and has over 16 years of solid hands-on experience working in different facets of Power Plant industry.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 13/03/1976
Gender : Male
Marital Status : Married

EDUCATION

: B. Sc. in Mechanical Power Engineering, Mansoura University, 2002

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Basic Operation Training by Siemens, MDEPC (15 days in Apr. 2004).
- : Basic Operation Training by Siemens, Lubbenau – GERMANY (21 days in Jul. 2004).
- : Mechanical Maintenance Training by Siemens, Berlin – GERMANY (7 days in Dec. 2004).
- : Operation and Maintenance Training, Alstom Power Plant Control System (DCS) Alspa p320 Distributed Control System, MDEPC (15 days).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2018 till now
Employer : [EGYPTROL](#), GE Energy Subcontractor
Project : Assiut PP Project - Conversion to CC - 8 GTs x 120MW + 2 ST x 240MW
Job title : Operation Manager

Dates : From Oct. 2017 till May 2018
Employer : [EGYPTROL](#), SIEMENS AG Subcontractor

- Project** : Nigeria – Azoura Edo 3x180MW SSC5-200E SIEMENS Simple Cycle
Job title : Deputy Commissioning Manager
- Dates** : From May 2016 till Oct. 2017
Employer : [EGYPTROL](#), SEPCO
Project : Shaybah Combined Cycle Power Generation Package (Saudi Aramco)
Job title : Senior Mechanical Commissioning/Operation Engineer
Job Description : Prepare Operating Instructions Manual (OIM):
- For the individual system operation as the following:
 - OTSG (Once Through Steam Generator) coupled with each CGTG (total 6 units).
 - STGs (Steam Turbine Generator) receiving HP and IP steam from the OTSGs.
 - ACCs (Air Cooled Condenser) condensing steam through air-cooled finned tubes.
 - Boiler Feed Water System.
 - HP/IP system & Bypass steam.
 - Closed cooling water system.
 - Condensate & make-up water system....etc.
 - For Combined Cycle:
 - Normal start-up.
 - Normal operation.
 - Normal shutdown.
 - Emergency shutdown.
- Dates** : From Nov. 2016 till Apr. 2017
Employer : [EGYPTROL](#), SIEMENS AG Subcontractor
Project : BURULLUS POWER PLANT IN EGYPT CCGP 4800MW
 The facility is a 2 x 2 x 1 combined cycle configuration consisting of:
- 8 SIEMENS (Frame 8000H) gas turbines
 - 8 NEM HRSG triple pressure reheat cycle
 - 4 SIEMENS Steam Turbines
- Job title** : Mechanical Commissioning & Start-up Engineer
Job Description :
- Carry out all commissioning and pre commissioning activities of fuel gas system from gas reducing system to gas compressor and gas turbine filter skid included pressure test, blow out, purge by nitrogen and nitrogen container generation commissioning, forced cooling system generator cooling and seal oil cooling), co2 system and water firefighting system.
 - Reviewing drawings and specifications to ensure a thorough understanding of plant operational and safety related issues.
 - Applying the project Commissioning Plan in the execution of the work.
 - Lead and coordinate BOP commissioning activities.
 - Lead, manage and coordinate Operation activities and vendor service specialists at site and office.
 - Reporting to the SIEMENS Commissioning Manager.
 - Conduct meeting with commissioning manager to review testing, commissioning progress and HSE conformance on daily and occasionally more frequent basis as well as meetings with the vendors

to resolve any equipment related problems.

- Analyse and address critical areas of progress/delays in testing and commissioning.
- Organizing a commissioning team, incorporating the training and helping recruiting the required staff and operation team.
- Conduct commissioning ability reviews of project documents.
- Ensuring that all safety and precautionary requirements and procedures are followed during the commissioning process in line with the commissioning schedule.
- Ensure all construction activities are completed prior to taking up the system for commissioning.

Dates : From May 2015 till Apr. 2016
Employer : [EGYPTROL](#), GE Energy Subcontractor
Project : Assiut Project (8x120MW)
Job title : Commissioning & Start-up Engineer
Job Description :

- Carry out all commissioning activities as per manufacture recommendation.
- Start-up of the units.
- GE Frame 9E Turbo Generator Units.
- Mark VI Control System.
- 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 condition.

Dates : From Jul. 2013 till Apr. 2015
Employer : [EGYPTROL](#), SAMSUNG C&T Subcontractor
Project : Qurayyah Independent Power Project (6x750MW) – Combined Cycle
Job title : Commissioning & Start-up Engineer
Job Description :

- The Qurayyah IPP project is approximately 100 km south of the port of Dammam on the coast in the Eastern province of the kingdom of Saudi Arabia. The facility is a 2 on 1 combined cycle configuration consisting of twelve (12) Siemens SGT6-PAC 5000F gas turbine generating units (GTGS), twelve (12) heat recovery steam generators (HRSGs), six (6) Siemens SST6-4000 steam turbine generators (STGs) and six (6) sea water condensers.
- Carry out all commissioning activities of chiller system (Turbine Inlet Air Cooling (TIAC)).
- System description:
 - TIAC system is designed to Deliver chilled water to the Cooling coil is located in the turbine inlet air duct. Cooling turbine inlet air Results in a higher turbine power output compared to the hot ambient Conditions when the air mass flow is low due to low air density. Chilled water Absorbs heat from the turbine incoming air and transfers it to the chiller Module. In the chiller module the path of the heat transfer is: from chilled Water to refrigerant, from the refrigerant to condenser water, from the Condenser water to the air via evaporate ion. There are two (2) independent TIAC systems, North and South, each serving a Set of six Gas Turbines at the

- Qurayyah Power Plant.
- Each TIAC system is composed of:
 - Eight (8) modular chiller plants.
 - A single secondary chilled water pump module.
 - A single TES tank.
 - TIAC system design parameters are:
 - Ambient Wet Bulb (WB) temperature: 33.1 °C.
 - Evaporator chilled water supply/return temperature: 7.20 °C / 24.3 °C.
 - Condenser water supply/return temperature: 35.6 °C / 42.98 °C.
 - TIAC system capacity, per ARI:
 - Cooling capacity of a single chiller module: 5,768 TR.
 - Cooling capacity of the chiller plant (8 chiller modules): 46,144 TR.
 - Cooling capacity of the TES tank: 180,150TR-hrs.
 - Two months preparing the required document for CCC (commissioning completion certificate) to be available during execution activities.
 - Carry out all commissioning activities of Gas compressor & reduction skid.
 - Checking the completing of erection works (MECH.-ELEC.-I&C).
 - Supporting and follow all pre-commissioning activities as hydro tests.
 - Carry out piping air blowing with test record.
 - Passivation of piping by N2 with certain pressure.
 - Gas compressor lube oil flushing.
 - Start greasing the gas compressor motors prior to solo run test.
 - Solo run test for gas compressor motors with test record.
 - Charging the fuel gas with safety regulation.
 - Heat run test for gas compressor with test record.
 - Start-up tasks and follow up the system during operation.
 - Supporting the commissioning activities for the colleges during vacation, example: GTs, HRSG, W/S cycle.
 - Troubleshooting supporting and maintenance program making as per vendor recommendations.
 - Carry out performance tests.
 - Documents making and turn over all packages to owner.

Dates : From Mar. 2012 till Jun. 2013

Employer : [EGYPTROL](http://www.egyptrol.com), ANSALDO ENERGIA Subcontractor

Project : 6th October Power Station (600MW)

Job title : Commissioning & Start-up Engineer

Job Description :

- Carry out all commissioning activities as per manufacture recommendation.
- Start-up of the units (Ansaldo Energia Turbo Generator).
- 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.

Dates : From Jun. 2011 till Feb. 2012
Employer : Kharafi National Company
Project : Damietta Project (500MW)
Job title : Commissioning & Start-up Engineer
Job Description :

- Carry out all commissioning activities as per manufacture recommendation.
- Start-up of the units:
 - GE Frame 9E Turbo Generator Units.
 - Mark VI Control System.
- 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.

Dates : From Jul. 2008 till Apr. 2011
Employer : Al-Toukhi Company for Industry, Trading & Contracting (EPC) – KSA
Project : Generation Expansion at Faras Power Plant
Job title : Site Lead Mechanical Engineer
Job Description :

- Analyze and recommend design concepts to meet customer requirements and evaluate design approaches for specification compliance.
- Interface and coordinate with purchasing, vendors, manufacturing, and other engineering personnel in the bills of materials, value analysis and testing phases of the project to insure compliance with internal and customer requirements.
- Review, negotiate and accept mechanical portions of project specifications received from customers.
- 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 materials 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, cost estimates, proposals and schedules.
- Actively participate in the erection / installation / commissioning and start-up phase of the units and systems:
 - GE Frame 7 FA Turbo Generator units.
 - Mark VI Control System.
 - Turbine and generator fixators.
 - Load coupling.
 - Pietro Fiorentini Fuel Gas Treatment (ESD Valve, Scrubber, Filter Separator, Metering Skid and Water Bath Heater) installation and inter connecting piping hydro test, air blow application.

- Atlas Copco Air Compressors installation and inter connecting piping leak test application.
- Atlas Copco Gas compressor installation, commissioning & start-up.
- Supervised drop check for 4 units.
- Supervised rough and final alignment for 4 units.
- Lube Oil flushing with respecting GE procedure.
- Leak test and air below for all turbine piping systems with respecting the GE recommendation.

Dates : From Apr. 2008 till Jul. 2008

Employer : Al-Toukhi Company for Industry, Trading & Contracting (EPC) – KSA

Project : Generation Expansion of PP#08 Ext. III

Job title : Site Lead Mechanical Engineer for 4 units GE Frame 7FA Turbo-Generator Set

Job Description :

- Ensure all mechanical engineering project work complies with statutory and regulatory requirements and company policies and practices.
- Provide high level technical support for all mechanical engineering project work as required.
- Prepare documentation for standards, procedures, safe working practices and monitoring in respect of work on or around mechanical engineering scopes.
- Contribute to the cost-efficient delivery of mechanical engineering by managing the man hour budget and reviewing and approving mechanical capital cost estimates, recommending alternative approaches.
- Contribute to engineering best practices by interfacing with engineers from other disciplines to review and improve design standards and procedures.
- Supervise GTG Customer piping fabrication / welding / installation, hydro / leak testing and commissioning / flushing if required as per the approved drawing and site condition for the followings:
 - Inlet bleed heat piping installation and leak test application.
 - Generator and Turbine Cooling Water CS supply and return pipe lines, with the required orifices installation for cooling water flow rate adjustment as per GE design/drawing.
 - GE turbine compartments Fire Fighting CO2 pipe lines connection with F.F.LP CO2 tank.
 - Water Wash SS pipe line with the required insulation / cladding.
- Supervise the execution of the following GTG auxiliaries and systems:
 - GE Air intake filters erection / installation as per GE drawing with the required air piping Leak Test (1.1 from the design pressure) just to put the system ready for proper connection with GE Air Processing Unit (APU) for online cleaning service / BOP Atlas Copco Air Compressor for offline cleaning service.
 - GE Fin Fan Cooler.
 - GE Cooling water pumps skid.
 - Lube/Hydraulic oil system, motors rotation check with the required system flashing.
 - GTG PEECC.
 - Exhaust stacks installation, insulation, welding, and barrier wall cladding fabrication.

- Exhaust stacks high temperature paint application (silicon aluminum 600 c).

- Dates** : From Apr. 2003 till Mar. 2008
- Employer** : MDEPC (Middle Delta Electricity Production Company)
- Project** : Nubaria Combined Cycle Production 2250MW
- Job title** : Turbine Operation Shift Charge / 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.
 - Safe operation for GTG Siemens 250MW x 4 units and all auxiliaries during the reliability period.
 - Energizing of 500KV and 220KV switchyard.
 - Switchgear 6.3KV and MCC 400V for all plant auxiliaries.
 - Responsible for daily report.
- Field of experience** :
- Solid experience in different facets of Power Plant industry.
 - Strong understanding with different EPC philosophies in power generations and transmissions.
 - Well-exposed and experienced in the installation and operation of the following:
 - GE Frame 7FA Gas Turbine-Generator Units.
 - GE Frame 9E Gas Turbine-Generator Units.
 - Ansaldo Energia Gas Turbine-Generator Units.
 - Rotating Equipment Maintenance & Operation.
 - Turbine Operation for the following types:
 - 4 Siemens Gas Turbines (250MW), 4 Alstom Horizontal HRSGs with 1 Mitsubishi Steam Turbine (250MW).
 - 4 Hitachi Gas Turbines (25MW), 4 Vertical HRSGs with 1 GE Steam Turbine.
 - 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 displays 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 projects within required timeframes.
 - Demonstrated abilities and passion for providing technical advice to staff members, and embracing a culture that values team work.
 - High knowledge in Piping Fabrication, Installation and Testing.
 - High knowledge in Transformers Testing (insulation resistance, winding resistance, Ratio test, protection devices test, Tan Delta and oil test).