

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 13 years hands-on experience working in construction, maintenance, operation, commissioning and start-up at Power Plants.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 06/10/1982
Gender : Male
Marital Status : Married
Residence : Currently KSA

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Cairo University, 2005
: Pre-masters degree (generation and utilization of electrical energy), 2009

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: Visual Basic
: Matlab

TRAINING COURSES AND CERTIFICATIONS

: Extra high voltage researches.
: Gas turbine operation systems.
: Methods of measuring the efficiency of the generating unit.
: Protection relays for transformers, generators and motors.
: Industrial security and civil defense.
: Management of maintenance works by AMPELZMA program.
: Protection of surges and transient current (Earthing).
: Operation of Electro – Chlorination Plant (4 x 630 kg/h Sodium hypochlorite).
: Protection relaying and metering system.
: Authorization certificate from ABB to perform operation & maintenance for generator circuit breaker (GCB).

- : Cairo North Power Plant Training Center (2006):
 - Operation of gas turbine unit.
 - Operation of high power electrical generator.
 - Advanced protection in power station.
 - Treatment with Mark VI control program.
- : Summer trainings at:
 - Pyramids Extra High Voltage Research Center (2004):
 - Testing the electrical equipments (transformer - C.B. - cable, etc.).
 - How to use the testing devices (impulse generator - partial discharge, etc.).
 - How to maintenance (motor - generator).
 - Cairo West Power Plant (2x330MW) (2003):
 - Operation of the steam turbine station.
 - Maintenance of the electrical equipments (generator – motor - C.B. - G.I.S, etc.).
 - Advanced protection in power station.
 - Treatment with Mark DCS control program.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From May 2019 till now
- Employer** : Arabian Bemco Contracting Company
- Project** : Riyadh Power Plant No. 12 – Saudi Arabia
(consists of 2 power blocks, the configuration of each combined cycle block is 4GTG + 4HRSG + 1 STG + 1ACC with sales gas as primary fuel and distillate / Arabian Super Light (ASL) as secondary)
- Job title** : Project Closeout Manager
- Job Description** :
- Contribute to the Field Services Operations in line with the functional strategy to ensure vertical alignment and horizontal integration with the project team.
 - Work closely with the project managers on the preparation, planning, operational activities, mitigations taken...etc. as required, to keep them informed and updated on the work progress.
 - Contribute to the preparation of the department's budget by advising on the most efficient tooling and/or alternatives if any, manage and monitor the daily consumption against the budget/planned consumption so that areas of unsatisfactory performance are identified, rectified promptly and potential performance improvement opportunities are capitalized upon.
 - Work with the project team of the respective plant, to plan the outage closeout strategy, scope of work resources needed, required manpower, spare parts' requirements, QA plan, and outage plan.
 - Working on Issuance of PAC(s) and FAC(s) for the project.
- Dates** : From Jan. 2015 till Apr. 2019
- Employer** : Arabian Bemco Contracting Company
- Project** : Qurayyah Combined Cycle Power Plant (QCCPP), Dammam – KSA
- Job title** : Deputy (Acting) Operation & Maintenance Manager
- Job Description** :
- Manage all operation and Preventive/Corrective maintenance related activities.
 - Organize the manpower as per site requirements.

- Lead the activities during outage programs.
- Coordinate between BEMCO and Saudi Electricity Company (SEC).
- Responsible for the overall administration and supervision of operation/maintenance staff and operating activities including planned shut down and starting of the plant in accordance with established work plans schedules and ensuring safety of all personnel and environment.
- Participate in all decisions regarding new design criteria, technical specifications and operating methods related to the plant.
- Conduct regular meetings to discuss work progress, schedules, problems, interferences, priorities etc.
- Responsible for efficiency and progress of work in accordance with production schedules and established standards.
- Responsible for initiating changes in methods, schedules and procedures needed to meet specific exigencies of the plant operations after suitable approval from the Plant Manager.
- Maintain reporting system which provides sufficient data to ensure that operations are being accomplished within the specified limits, schedules and technical parameters.
- Ensure and advise on proper and effective allocation and development of human resources to ensure maximum efficiency. Submit periodic reports to his supervisor and keep him informed on all technical problems, if any, as well as on new changes or modifications on existing work plant or schedule.
- Ensure Environmental Aspect-Impact and Hazard Risk Assessment are carried out, controlled and Identify, establish and monitor objectives, Targets and programs.
- Ensure identification of root cause for the identified non conformances / deviations and to implement corrective actions/Preventive actions.
- Carry out annual performance evaluation of reporting employees.
- Ensure effective management and control of plant operating functions/all chemical plant operation & maintenance and laboratory activities in accordance with established and contractual requirements, schedules, quality cost and time objectives.
- Ensure identified on the job training are provided systematically.

Dates : From Feb. 2012 till Jan. 2015

Employer : Arabian Bemco Contracting Company

Project : Qurayyah Combined Cycle Power Plant (QCCPP), Dammam – KSA:
Second stage (QCCPP-C):
The conversion to a Combined Cycle Power Plant.

- Mechanical Equipment:
 - Fifteen HRSGs vertical type, natural cooling (DOOSAN).
 - Five steam turbines "GE".
 - Five water cooled Surface type condensers (2-pass, 19.8 m3/sec CW flow each).
 - Five generator step-up transformers comprising main tank, conservator, HV, LV, neutral bushings, coolers, fans, instruments, etc.
 - Forty Five Boiler Feed pumps 3x50% for each HRSG.
 - Fifteen Condensate Extraction Pumps 3x50% for each Turbine.
 - MSF Desalination Plant 4,000 m3/day 3x50% streams.
 - Chemical dosing, steam and water sampling.

- Seawater Intake Screens System consisting of twelve Chain Raked Bar screens, twelve Drum Screens, Stop Logs & Flushing water systems for the screen.
- Ten Circulating Water Pumps 53,200 m³/hr @1.2mt head 2x70% per block c/w expansion joints combined isolating and check valves.
- Debris filters 10 for condensers and 10 for CCCW system.
- CCCW System for five blocks.
- Demineralization plant mixed bed (3x70%) streams 2,450m³ each.
- Re-mineralization & Neutralization Plants.
- Chlorination Plant.
- Hydrogen Plant.
- CO₂ System storage & vaporization.
- Two Distillate Water Storage Tanks, 10,000 m³ each.
- One De-mineralized water storage tank 8,750 m³.
- Extension to the Fire Protection & Detection systems.
- Electrical Equipment:
 - Five Generator Circuit Breakers.
 - Five Steam turbine driven Generators 18KV, 335.5MVA, 0.85lag P.F.
 - Five Generator step-up transformers 18/380KV, 290/386 MVA each.
 - Five Isolated-Phase bus ducts.
 - Five Unit Auxiliary Transformers 18/4.16KV, 18.75/25MVA.
 - Two Station transformers 18/13.8KV, 31.3/45 MVA.
 - Two Stationary auxiliary transformers 13.8/4.16KV, 18.75/25MVA.
 - Five Static Excitation Transformers 18/0.84KV, 2.15MVA each.
 - One 13.8KV Switchgear.
 - Seven 4.16KV Switchgears.
 - LV SWGR, MCCs & distribution boards.
 - Protection & relay panels.
 - DC, UPS, Grounding, Lightning Protection Systems.
 - MV, LV and I&C cables.

Extension #1 Block 6 (separate project with separate contract).

First stage: Simple Cycle (3x168MW) GE gas turbine frame 7FA.

- 3 units / 1 block "GE" Gas Turbine frame 7FA.
- 3 Gas turbine driven generators 18KV, 198MVA, 0.85lag P.F, 60HZ each.
- Three Generator step-up transformers 18/380KV, 130/180 MVA each.
- Three Generator Circuit Breakers.
- One Isolated-Phase bus ducts.
- Two Unit Auxiliary Transformers 18/4.16KV, 18.75/25MVA each.
- Three Static Excitation Transformers 4.16/0.48KV, 1.8MVA each.
- One 4.16KV Switchgears.
- LV SWGR, MCCs & distribution boards.
- Protection & relay panels.
- DC & UPS Systems.
- MV, LV and I&C cables.
- Grounding & Lightning Protection Systems.
- "DCS" Control System.
- Natural Gas and Distillate Firing Systems.
- 1 Emergency Diesel Generator (1x5MW).

Second stage: The conversion to a Combined Cycle.

- Mechanical Equipment:
 - Three HRSGs vertical type, natural cooling (CMI).
 - One steam turbine "GE".
 - One water cooled Surface type condensers (2-pass, 19.8 m3/sec CW flow each).
 - One generator step-up transformers comprising main tank, conservator, HV, LV, neutral bushings, coolers, fans, instruments, etc.
 - Nine Boiler Feed pumps 3x50% for each HRSG.
 - Three Condensate Extraction Pumps 3x50%.
 - Chemical dosing, steam and water sampling.
 - Two Circulating Water Pumps 53,200 m3/hr @1.2mt head 2x70%.
 - Debris filters 2 for condensers and 2 for CCCW system.
 - CCCW System for block.
 - Extension to the Fire Protection & Detection systems.
- Electrical Equipment:
 - One Generator step-up transformer 18/380KV, 290/386 MVA each.
 - One Steam turbine driven Generator 18KV, 335.5MVA, 0.85lag P.F.
 - One Generator Circuit Breaker.
 - One Isolated-Phase bus duct.
 - One Unit Auxiliary Transformer 18/4.16KV, 18.75/25MVA.
 - One Static Excitation Transformer 18/0.84KV, 2.15MVA.
 - One 4.16KV Switchgear.
 - LV SWGR, MCCs & distribution boards.
 - Protection & relay panels.
 - DC, UPS, Grounding, Lightning Protection Systems.
 - MV, LV and I&C cables.

Job title : Senior Electrical Engineer

Job Description :

- Manage all Preventive/Corrective maintenance related activities.
- Manage all clearance and tagging authority (CTA) related activities.
- Attend all meetings related to commissioning, operation and maintenance.
- Coordinate between the power plant and the substation during stability, REF, VT matching, live trip and synchronization tests.
- Review with commissioning the tests procedures and prepare the required isolation plans.
- Ensure PTW procedure is implemented effectively.
- Perform other duties as assigned.

Dates : From Aug. 2009 till Feb. 2012

Employer : Arabian Bemco Contracting Company

Project : Qurayyah Combined Cycle Power Plant (QCCPP), Dammam – KSA:
First stage (QCCPP-B): Simple Cycle (15x168MW) GE gas turbine frame 7FA.

- Fifteen units / 5 blocks (each block consists of 3 units) "GE" Gas Turbine frame 7FA.
- Fifteen Gas Turbine driven generators 18KV, 198MVA, 0.85lag P.F, 60HZ each.
- Five Generator step-up transformers 18/380KV, 130/180 MVA each.
- Five Generator Circuit Breakers.

- Five Isolated-Phase bus ducts.
- Ten Unit Auxiliary Transformers 18/4.16KV, 18.75/25MVA each.
- Two Station transformers 18/13.8KV, 31.3/45 MVA each.
- Two Standby Station transformers 34.5/13.8KV, 13/18MVA each.
- Two Stationary auxiliary transformers 13.8/4.16KV, 18.75/25MVA each.
- Fifteen Static Excitation Transformers 4.16/0.48KV, 1.8MVA each.
- One 13.8KV Switchgear.
- Six 4.16KV Switchgears.
- LV SWGR, MCCs & distribution boards.
- Protection & relay panels.
- DC & UPS Systems.
- MV, LV and I&C cables.
- Grounding & Lightning Protection Systems.
- "DCS" Control System.
- Natural Gas and Distillate Firing Systems.
- Four Emergency Diesel Generators (4x5MW).

Job title : Electrical Engineer

Job Description :

- Commissioning MV, LV Switchgears, DC Systems, Protection and Control panels, Diesel Generators.
- Handled commissioning and start-up of (15x168MW) GE gas turbine frame 7FA with Speedtronic mark VI control system.
- Dealt directly with the core level Engineers in the new project concerning the mechanical, electrical and I&C Commissioning divisions.
- Assisted Senior Engineers to prepare their reports about the plant operation punch items and warranty claims.
- Helped in all aspects of the project work.
- Responsible for diagnosing and troubleshooting problems related to the gas turbine.
- Assisted in the minor inspection of the GT's.

Dates : From May 2008 till Aug. 2009

Employer : Egypt Electricity Holding Co.

Job title : Testing & Research Engineer in Extra High Voltage Research Center

Job Description :

- Dealt directly with testing devices like partial discharge, high voltage tester, GIS tester, impulse generator, megger, turns ratio, etc.
- Testing the electrical products of the factories like ABB and Schneider, etc.
- Testing the electrical equipments in the power plants in Egypt like Cairo North, Sidi Krir.
- Testing the electrical equipments installed in the electrical network in Egypt like transformers, cables, insulators, etc.

Dates : From Jul. 2006 till May 2008

Employer : Cairo Electricity Production Co.

Project : Cairo West Power Plant:

- 2 units "SIEMENS" Steam Turbine & Generator (MCR: 357MW).
- 2 units "HITACHI" Steam Boilers (MCR: 1030 t/hr), Main Steam Pressure 175 bar.
- "ABB" DCS Control System.
- 3 Operation Modes: Coordinate Sliding, Constant Pressure and unit

- master off.
 - Natural Gas & Fuel Oil Firing Systems.
 - 2 Emergency Diesel Generators (2.5MW each).
 - 2 feeders 500KV.
 - 2 transformers 375MVA (500/220KV).
 - 2 Start-up transformers 25MVA (66/11KV).
- Job title** : Operation Engineer
- Job Description** :
 - Operating Engineer for steam power plant (2x330MW), DCS control.
 - Isolate and insure the equipment which needing a maintenance.
 - Familiar with operating all equipments when unit in service.
 - Open and follow the maintenance work permits.
 - Following the unit's alarms and operation curves.
 - Familiar with operating the unit from cold or hot start.
 - Insure the unit equipments when unit trip.
 - Direct organization the employees.
 - Familiar with stopping unit procedure.
- Dates** : From Mar. 2006 till Jun. 2006
- Employer** : Cairo Electricity Production Co.
- Project** : Cairo North Power Plant:
 - Two units "GE" gas turbine frame 9FA & generator (2x250MW).
 - Two units Heat Recovery Steam Generation (HRSG).
 - "DCS" Control System.
 - Operation mode: constant pressure mode.
 - Natural gas and oil firing systems.
 - Emergency diesel generator.
 - One steam turbine (1x250MW).
- Job title** : Operation Engineer
- Job Description** :
 - Handled commissioning and start-up of (2x250MW) GE gas turbine frame 9FA with Speedtronic Mark VI control system.
 - Dealt directly with the core level Engineers in the new project concerning the mechanical, electrical and I&C commissioning divisions.
 - Assisted senior engineers to prepare their reports about the plant.
 - Helped in all aspects of the project work.
 - Assisted in the minor inspection of the GT's.