

Holds a B. Sc. in Electronics & Communication Engineering and has over 11 years hands-on experience working in I&C field at several Power Stations.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 17/05/1983
Gender : Male
Marital Status : Married
Residence : Currently KSA

EDUCATION

: B. Sc. in Electronics & Communication Engineering, Menoufia University, 2005

LANGUAGES

Arabic : Native Language
English : Fluent

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Mark VIe training.
- : Gas turbine operation, GT aux., GT control systems, GT troubleshooting, Compressor performance & maintenance philosophy by Mitsubishi Heavy Industries in project site of Sidi Krir Combined Cycle (3 weeks) by Japanese Group.
- : Training for Generator operation & maintenance by Mitsubishi Electric Corporation Energy Systems Center in Sidi Krir Combined Cycle Project (1 week).
- : Off-shore training: DCS Yokogawa (CENTUM 3000) by Yokogawa Middle East Center in Bahrain.
- : On-shore trainings:
 - DCS Diasys netmation training by MITSUBISHI.
 - DCS ABB SYNPHONY.
 - PLC "ALLEN BRADLEY" training by ROCKWELL AUTOMATION.
 - Vibration BENTLY NEVADA 3500 training by GE.
 - Gas compressor ATLS COPCO training by ATLS COPCO.

- : On-shore training for MV SWGR'S type (RONEX), LV SWGR'S TYPE (BLOCK Set), Circuit breaker safe operation and maintenance, Protection.
- : Training for safe start-up, shut-down Heat recovery steam generator with 3 drums (multi-pressure HRSG and all its auxiliaries for example pre-heater sys., re-heater sys., recirculation sys., drains and vents and blow down system, etc. by Dutch Group from NEM Company (3 weeks in class, 2 weeks in local, 3 weeks in control room).
- : Auxiliaries operation and troubleshooting e.g. feed water pumps, both turbine and electrical, (drum level control), circulate water pumps (sea pumps), condensate pumps, service pumps, closed cycle cooling water system and air compressors, etc. by Toshiba (3 weeks).
- : Operation and maintenance Protection.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jan. 2016 till now
- Employer** : Saudi Electricity Company
- Project** : Installation and commissioning of EPCM Project PP13 project consists of two (2) 3 x 1 combined cycle power plant blocks located near Riyadh, Saudi Arabia. Each power block consists of three (3) GE 7001FA.05 Gas Turbine Generators (GTG), three (3) Heat Recovery Steam Generators (HRSGs), and one (1) GE D11 Steam Turbine Generator (STG). The gas turbines are capable of operating in simple cycle mode through use of a bypass stack and combined cycle mode. The term "block" means one 3 x 1 combined cycle block.
- Job title** : I&C Lead
- Job Description** :
- Following the Construction & Commissioning activities with contractors and a giant vendors GE gas/steam turbine & STF.
 - Reviewing Gas turbine vendor documents.
 - Steam turbine vendor documents.
 - HRSG vendor documents.
 - BOP vendors documents.
 - Equipment design and development.
 - System design, including concept sketches and layouts
 - Testing of material.
 - Specification and design calculations.
 - Attending all technical meeting with contractor and vendors.
 - Review System logics LOGIC of DCS (YOKOGAWA CENTUM VP).
 - Review Gas turbine logic.
 - All control package's for BOP's (Fuel gas compressors, ASL, WTP, air compressors, etc.).
 - Prepare controllers and instruments spare part lists.
 - Prepare instruments function location of SAP program.
 - Prepare preventive maintenance and predictive maintenance of controllers and instruments.
 - All the System architecture, network diagram, Connection diagram.
 - Participate in engineering work and tests (FAT) and site activities (SAT, Pre-commissioning, Commissioning & Start-up) as well as in maintenance and troubleshooting jobs.

Dates : From Apr. 2014 till Dec. 2015

Employer : Saudi Electricity Company

Project : 2175MW CCGP-12 RIYADH, SAUDI ARABIA

The Project comprises eight (08) gas turbines GE-7FA, eight (08) HRSGs, two (02) Steam Turbines and balance of plant etc. The Project is to operate on Natural Gas (NG) as base fuel and Arabian Super Light Oil as standby. The gas turbines are capable of operating in simple cycle mode through use of a bypass stack and combined cycle mode. The term "block" means one 3 x 1 combined cycle block.

Job title : I&C Lead

Job Description :

- From the project starting following instruments hook up, installation and commissioning until hand over.
- Presently working on Saudi Electricity Company acting as Senior Instrument and Control Engineer, responsible of managing all aspects of I&C maintenance of complete plant consistent with protecting the power plant and achieving Site KPIs (Reliability/Availability/Quality) in a safe, reliable, economical and environmentally friendly manner To provide leadership to the maintenance team (Instrument & Control) in the day to day maintenance activities:
 - Trace through the software documentation.
 - Implement control constant modifications.
 - Checking the software sequencing.
 - Implement control system software changes.
 - Set up and modify if necessary the hardware layout associated with the Gas control system (MKVle speedtronic).
 - Pre-commissioning and commissioning activities on GT GE-7FA.
 - Work with toolbox ST simplicity application.
 - Perform start-up/shut-down sequencing and turbine/generator operation.
 - Networking, Backup, TCP/IP, File Sharing.
 - Commission and functionality all auxiliary's system.
 - Carry out cold and loop check.
 - Familiar with Gas Turbine Auxiliary Systems (Instrumentation (Control / Measuring Devices), Lubricating and Starting Means System, Cooling and Sealing Air System, Instrument Air System, Cooling Water System, Gas Fuel System, Liquid Fuel System, Atomizing Air System, Fire Detection and Protection System, Inlet Air Heating System, Hydraulic Supply and Inlet Guide Vanes System, Heating and Ventilation System, Inlet and Exhaust System, Hazardous Gas Detection System, Fuel Purge System, Seal Oil System, LCI, Excitation, GCB, etc.
 - Generate an I/O Report & Force Input and Output Signals Alarm Viewing, Tracing and Troubleshoot Diagnostic Alarms.
 - Upload from the Controller and Down load to the controller.
 - Commissioning activity cold loop check, hot loop checks field instruments calibration.
 - Mark Vie, Tool box ST and CIMPLICITY Network Architecture.
 - Hardware configuration and types of I/O Modules.
 - Prepared the function location list of 8 Gas turbines for SAP program.
 - Develop, supervise and co-ordinate plant maintenance activities.
 - Plan and inspect completed work on plant equipment.

- Maintain records, prepare reports and compose correspondence relative to work.
- Acquire considerable knowledge of the process and the relevant mechanical and electrical systems throughout the plant and apply the same to trouble shoot problems and lead the maintenance team.
- Train the subordinates on preventive and corrective maintenance.
- Communicate effectively with managers, peers and team fellows, both verbally and in writing.
- Assist Maintenance Manager in planning and scheduling outage works with due regard to Annual scheduled maintenance plan.
- Assess plant needs for spare parts & supplies and generate material requisitions.
- Co-ordinate with Stores and Procurement for inventory management.
- Ensure compliance in all areas of Health, Safety and Environmental programs and procedures as applicable to the maintenance activities.

Dates : From Jun. 2013 till Mar. 2014

Employer : Ansaldo Energia

Project : BANHA POWER PLANT ANSALDO STEAM TURBINE CP-106

Job title : I&C Commissioning Engineer

Job Description :

- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Liaise with the project HSE group to ensure that all have been adequately trained.
- Ensure project quality requirements are met.
- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Identify commissioning priorities and manage the interfaces between mechanical completion / pre-commissioning and commissioning requirements.
- Responsible for conducting with planning team to prepare the schedule of the commissioning activities.
- Prepare and reporting of progress of the commissioning activities.
- Participate for all commissioning activities of Gas turbine and Steam turbine.
- Cold commissioning, hot commissioning and functional check of all systems of steam turbine like turning gear system, Hydraulic system, lube oil system, high pressure, low pressure, turbine drain system, generator and condensate air removal system. Exhaust area bearing #1 all vibration probes. DC lube oil and seal oil motor functional test, Hydraulic and lube oil AC motor functional test and turning gear system functional test. Energization of ABB Panel and all system related to control system.

Dates : From Nov. 2012 till Jun. 2013

Employer : ABB Italy

Project : Rehabilitation Works at Damanhour Power Plant Unit 325MW
Job title : Commissioning I&C Engineer
Job Description :

- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Liaise with the project HSE group to ensure that all have been adequately trained.
- Ensure project quality requirements are met.
- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Identify commissioning priorities and manage the interfaces between mechanical completion / pre-commissioning and commissioning requirements.
- Responsible for conducting with planning team to prepare the schedule of the commissioning activities.
- Prepare and reporting of progress of the commissioning activities.
- Participate for all commissioning activities of Gas turbine and Steam turbine.
- Cold commissioning, hot commissioning and functional check of all systems of steam turbine like turning gear system, Hydraulic system, lube oil system, high pressure, low pressure, turbine drain system, generator and condensate air removal system. Exhaust area bearing #1 all vibration probes. DC lube oil and seal oil motor functional test, Hydraulic and lube oil AC motor functional test and turning gear system functional test. Energization of ABB Panel and all system related to control system.

Dates : From Mar. 2012 till Nov. 2012

Employer : Ansaldo Energia

Project : 6th OCTOBER (4x150) 600MW SIMPLE CYCLE POWER PLANT

Job title : I&C Commissioning Engineer

Job Description :

- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Liaise with the project HSE group to ensure that all have been adequately trained.
- Ensure project quality requirements are met.
- Ensure all applicable project safety procedures are prepared and fully understood and implemented throughout the pre and commission phases.
- Identify commissioning priorities and manage the interfaces between mechanical completion / pre-commissioning and commissioning requirements.
- Responsible for conducting with planning team to prepare the schedule of the commissioning activities.
- Prepare and reporting of progress of the commissioning activities.
- Participate for all commissioning activities of Gas turbine and Steam turbine.
- Cold commissioning, hot commissioning and functional check of all systems of steam turbine like turning gear system, Hydraulic system,

lube oil system, high pressure, low pressure, turbine drain system, generator and condensate air removal system. Exhaust area bearing #1 all vibration probes. DC lube oil and seal oil motor functional test, Hydraulic and lube oil AC motor functional test and turning gear system functional test. Energization of ABB Panel and all system related to control system.

- Dates** : From Oct. 2007 till Mar. 2012
- Employer** : West Delta Electricity Production Company
- Project** : Sidi Krir Steam Power Plant (2x320MW SIEMENS steam turbine)
- Job title** : I&C Maintenance Engineer
- Job Description** : Maintenance Specialist Instrument & Controls (Team Leader I&C) is responsible of managing all aspects of I&C maintenance of complete plant:
- Supervise the erection works with Gas Turbine Contractor.
 - Pre-commissioning, Commissioning and Start-up sequence.
 - Safe start-up and shutdown for the gas turbine units.
 - Safe start-up and shut down for the steam turbine unit.
 - Responsible for reliability and performance test for units.
 - DCS Diasys netmation (for gas turbine control).
 - DCS ABB SYMPHONY (for the steam turbine).
 - DCS Yokogawa (CENTUM 3000).
 - PLC "ALLEN BRADLEY" (for gas compressor ATLS COPCO).
 - PLC "VIPA" (for diverter damper).
 - Vibration BENTLEY NEVADA 3500.
 - Field instruments Calibration, Installation and Commissioning & Maintenance.
 - Pressure instruments (transmitters, switches ...).
 - Level instruments (transmitters, switches ...).
 - Flow instruments (transmitters, switches ...).
 - Temperature instruments (transmitters, switches ...).
 - Valve adjustment (pneumatic valves, hydraulic valves, "MOOG").
 - Gas density analyzers verifications, flow computer, gas chromatograph.
 - Gas compressor ATLS COPCO instruments.
 - Pulse compressor ATLS COPCO instruments.
 - Purge air compressor J.P. SAUER & SOHN instruments.
 - Air intake system instrument.
 - GT Inspection Responsibilities:
 - GT INSTRUMENT & DDC SECTION FOR TURBINE INSPECTION.
 - Installation the instruments connected to cable and check the wiring.
 - BPT. - 2.DCT.
 - GT casing metal temp. (Comb.-comp. casing upper & lower, turbine casing upper).
 - Comp. inlet air temp. (1, 2).
 - Measurement of resistance and insulation resistance. Connected wire after carried out the indication break check.
 - Installation, connected the cable, lighter checks for flame detector 4 pcs and check the flame voltage.
 - Installation the air flexible hose, connected power cable for igniter 2 pcs, igniters spark test and igniter's movement test, sensor &

- Accelemereter.
- CPFM sensor and extension cable connected 20 pcs.
- Accelemereter and extension cable connect 4 pcs.
- Adjustment for fuel gas main FCV fuel gas main PCV (A), fuel gas main PCV (B), fuel gas pilot FCV, fuel gas pilot PCV.
- GT IGV, GT comb. Bypass valve.

Dates : From Jan. 2006 till Sep. 2007
Employer : LENA ENVIRONMENTAL SERVICE COMPANY
Job title : I&C Maintenance Engineer
Job Description : Responsible for:

- Electrostatic precipitators filter.
- Bagging Filter.
- Field instruments Calibration & Maintenance.

Field of experience :

- Instrumentation Skills:
 - Control Loop Checking and Testing.
 - Calibration of various Pressure, Temperatures, Flow (YOKOGAWA), Control Valves Positioners SIEMENS, ABB, METSO, and Flow serve, I/P Converters.
 - Worked on the calibration of Bentley Nevada vibration sensor and loop check.
 - Worked on Motor operated valve (MOV): AUMA and FLOWSERVE MOV energization and commissioning activity done and solenoid valve.
 - Configuration, Fault diagnostics, preparing connection to a PLC.
 - Review of P& ID, Hook-up drawings, Instrument location & wiring layout, air Flow Diagrams, CABLE /JB Schedules, Instrument Specifications, Loop Diagrams, Panel Wiring Diagrams etc.).
 - Able to read Instrument Data Sheets for various Field Instruments, Preparation of Instrument list.
 - Device summary, elementary drawing, single line MCC drawing, interconnection drawing.
- Automation Skills:
 - Preparing I/O list, preparing I/O specifications etc.
 - Knowledge of motors, electrical schematics, proximity switches, Timers and counters.
 - Industrial communications systems (Ethernet, Modbus, Profibus).
 - Worked on GE Mark Vie controller.
 - Working on ABB system.
 - Worked on YOKOGAWA VP system.
- Permit To Work System and Job Safety Analysis:
 - Good knowledge about Permit to work systems (PWS) Cold work permit, hot work permit, Confined Space Entry permits.
 - Effective knowledge on Lockout Tag out procedures.
 - Understanding the scope of work and risk assessment involved before starting the job.
 - Conducting a Toolbox Talk and taking all the safety measure as mention on JSA.