103780-ICX-1CMOS-E-2000

Lead I&C System Engineer (Comm. / GT Controller)

Holds a B. Sc. in Electronics & Communication Engineering and a post-graduate Diploma in Automatic Control. Has over 17 years hands-on experience working in I&C field.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 14/02/1979

Gender : Male
Marital Status : Married

EDUCATION

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

2000

: Post-graduate Diploma in Automatic Control, Cairo University, 2007-2009

LANGUAGES

Arabic : Native Language

English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

Overseas trainings:

- GT I&C Commissioning Training, Siemens, Berlin Germany (2016).
- Siemens Power Plant Automation, SPPA-T3000 Engineering, Maintenance and Service, Siemens Power Plant Automation, SPPA-T3000 System Set-up, Siemens CM-T3000 Training, Location: Siemens Power Academy Karlsruhe, Germany.
- Siemens Power Plant Automation, SPPA-T3000 Advanced Maintenance Training and Gas Turbine Governor and Failsafe System, Location: Erlangen and Furth, Germany.

Local technical trainings:

- Gas Chromatograph: (Yokogawa 1000 MI) Operation & Maintenance, Company: YOKOGAWA Middle East.
- Siemens Power Plant Automation, SPPA-T3000 Engineering, Maintenance and Service, Company: Siemens Germany.
- Advance Electronics LTD Fire and Gas System, Company: Zener Electronics Services.
- Gas Turbine Total Orientation Training (on site), Company: Siemens.

- Steam Power Plant Basics and site specifics training courses, constituting a program of concentrated study of power plant equipment & systems, theory and application, SHOUBRA EL-KHEIMA Power Station, Cairo – EGYPT.
- Network Implementation and Maintenance software and hardware, Information Technology Institute (ITI), Cairo – EGYPT.
- Communication Different Departments (optical fiber, transmission. Mobile, etc.), National Telecommunication Institute (NTI), Cairo -EGYPT.

Safety trainings:

- Emergency Aid and Appointed Persons (DCAS), Company: First Aid International.
- First Aid, Company: Gulf Test Safety Consultancies.
- Environmental Key Performance Indicators course, Company: BRITISH SAFETY COUNCIL.
- HSE Induction Training, Major Hazards & Emergency Planning Training, Risk Assessment Training, Preventive Back Injury Training, Display Equipment Training, etc., Company: M Station DEWA Jebel Ali Power Station, Dubai – UAE.
- SAFETY TRAINING CERTEFICATE, Company: Doha East Power Station - ABB Site, KUWAIT.

Management trainings:

- Creative Problem Solving and Decision Making, Company: Spearhead Training.
- The 7 Habits of Highly Effective People, Company: Franklin Covey Middle East.
- Technical Report Writing Skills, Company: SOS Services BUREAU.
- Project Management Fundamentals Worth 24 PMI-PDUs, DEWA'S Project Management Office.
- Developing People for Excellence, The Excellencors for Training and Performance Development.

CHRONOLOGICAL EXPERIENCE RECORD

From Mar. 2016 till now **Dates** Siemens S.A.E, Cairo **Employer**

Job title I&C (GT Controller) System Engineer (Field Service team)

Beside the main role for the GT hot commissioning after the Major **Job Description**

Overhauls, I did and managed the following:

- Midelec Siemens GT V64.3 SGT5 GT21 (from Sep. 2018 till now):
 - DCS Upgrade from SPPA T2000 to SPPA T3000.
 - Cold commissioning, hot commissioning, start-up and Tuning.
- ANSAN Korea Power Plant Siemens SGT6 8000H GT11 & 12 (May 2018):
 - DCS New HW/SW logic modifications.
 - Cold commissioning of the IGV/VGV New control philosophy.
 - Start-up.
- Nubaria Siemens SGT5 4000F GT21 & 12 (from Jan. till Apr. 2018):
 - DCS Upgrade from SPPA T2000 to SPPA T3000.
 - Cold commissioning, Hot commissioning, start-up and Tuning.

- SFC Upgrade.
- Egypt MEGA Projects:
 - New Capital Siemens SGT5 8000H Block 30/20 (from Jul. Till Dec. 2017):
 - Loop check.
 - Cold commissioning.
 - ❖ Start-up.
 - Hot commissioning.
 - Tuning.
 - El-Burullus Siemens SGT5 8000H Block 20 (May/Jun. 2017):
 - Loop check.
 - Cold commissioning.
 - Start-up.
 - Hot commissioning.
 - Nubaria Siemens SGT5 4000F GT22 & 11 (Mar./Apr. 2017):
 - ❖ DCS Upgrade from SPPA T2000 to SPPA T3000.
 - Cold commissioning, start-up and Tuning.
 - SFC Upgrade.
 - El-Kureimat Siemens SGT5 4000F GT11 & 12 DCS Upgrade from SPPA T2000 to SPPA T3000 (Feb./Mar. 2017).
 - Talkha Siemens SGT5 4000F GT 11 & 12 (HGPI) DCS Upgrade from SPPA T2000 to SPPA T3000 commissioning, start-up and tuning (from Sep. till Dec. 2016).

Dates : From Apr. 2010 till Feb. 2016

Employer : Dubai Electricity and Water Authority DEWA, Dubai, UAE

Project : 2,000MW Combined Cycle Power Plant M STATION DEWA Jebel Ali Power

Station

Job title : Instrumentation & Control Maintenance Engineer

Job Description

- DCS: Siemens Power Plant Automation SPPA-T3000 (largest DCS network for Siemens T3000 all over the world (10 servers Stratus 4500 connected together with Router Mach 4003)):
 - Creating the Runtime Containers (Standard, FM, and fail safe).
 - Following the Procedure for loading the S7 Execution Frame.
 - Creating the Function Diagrams, and assign them to the Runtime Containers.
 - Creating the MIMCS Diagrams with integrated engineering or without.
 - Creating the peer to peer communications between the different Aps.
 - Doing the Multiunit communications signal exchange between the different servers.
 - Using the T3000 admin console.
 - Using the Stratus FT administration tool.
 - AP online and offline firm ware upgrade & downgrade.
- Gas Turbine: Siemens SGT5-4000F SPPA-T3000 with FM458 Controller (Engineering & troubleshooting):
 - Creating the Runtime Containers.
 - Following the Procedure for loading the S7 Execution Frame.
 - Creating the Function Diagrams, and assign them to the Runtime Containers.

- Creating the FM 458 design (FM Logic, redundancy and signal exchange).
- Performing the transaction handling for the design (compiling & downloading).
- Carrying the Gas Turbine ESV/CV Stroking & adjusting of the operating point.
- Dealing with the high speed flight recorder DELPHIN PROFI MESSAGE loading and downloading of the configuration adding new signals...etc.
- Knowing some knowledge about combustion tuning (pilot flow curve, humidity curve, OTC) with commissioning engineer.
- Siemens ET200 Software Failsafe, SCHLOESSER Hardwire SIL3 Protection System & Braun E1655.51: Over speed / speed monitoring System.
- Argus (IFTA): Humming and Acceleration Monitoring System.
- VM600 (Vibrometer) Vibration Monitoring System loading and downloading of the configuration.
- WHRSG with Supplementary Firing: DHI 425T/HR Steam Boiler.
- Steam Turbine: Alstom HDC200/2AS with adaptive stage, CONTROL SYSTEM ALSPA P320 STEP 5, CONTROCALD VER.4.2, CENTRALOG VER 5.7.
- Auxiliary Boiler: STF 395T/HR.
- BOP System: EDG, BSDG, Demineralization Plant, Instrument Air Compressor, Natural Gas & Diesel Fuel Supply System etc.
- Advance Electronics LTD Fire and Gas System, Siemens PLC S7 (Air Intake, EDG, BSDG and GT Air Compressor Wash skid), Allen Bradley: BSDG Governor Control and Protections, Bentley Nevada: Gas Compressor Vibration Monitoring System, Emerson Flow Computer: Flo BOSS S600.
- Duties and Responsibilities:
 - Supervise contractors in dismantling and re-installation of instrument within the Gas Turbine package during Overhauling and carryout inspection on Gas Turbine field Instrument including Hydraulic Servo valves.
 - Arranged resources schedule and control the routine, preventive overhauls and emergency maintenance, in order to efficiently and safe complete all the activities well within the allocated period of outage.
 - Maintain inventory of spare / tools / test equipment and provide proper storage code traceability. Estimate and budget for the requirement for the year.
 - Update, maintain records, generate reports related to the maintenance work, maintain master list of drawings, calibrate/test tools and test equipment.
 - Monitor parameters of running machines, troubleshoot and derive effective solutions to equipment problems, make available during emergencies round the clock.
 - Investigate the possibilities of improvement in the process in line with the strategic target. Explore possibility of improvement in the maintenance quality, safety, man hours spent and cost effectiveness, in order to strengthen the supervisor's effort to contribute to the organization's action plan of 'Continuous

Development and Process Improvement'.

- Review Consultant's specifications, data sheets, conceptual P&IDs and panel drawings and other control system documents for Instrument, and equipment and bulk materials as necessary with the submitted as built FEED drawings from the contractor.
- Review documents related to upcoming projects, verify their adherence to the contract specification.
- Follow and adhere to the OH&S management System Manual as per DEWA Standards.
- Carry out / Review Risk Assessments, monitor work practices and methods, conduct toolbox talks, conduct safety and housekeeping inspections.
- Undertake any special assignment under the directives of the management, in order to support the organization's smooth functioning.

Dates : From May 2009 till Mar. 2010

Employer : Cairo Electricity Production Co. (CEPC), Cairo, EGYPT

Project: 660MW Thermal Power Plant Units 5, 6 Cairo West Power Station

Job title : Instrumentation & Control Maintenance Engineer

Job Description : • DCS: ABB PRO Control P14.

 Steam Turbine: Siemens MCR: 357MW, Control System AS 220 EA STRUK L Automation systems, AS 220 EHF fail safe system with OS 250 for protection, ISKAMATIC (A, B, C).

• Steam Boilers: HITACHI MCR: 1030 T/Hr, Main Steam Pressure 175 bars. NG & HFO Firing Systems.

 BOP System: BFWP with Woodward speed control, Demineralization Plant, Instrument Air Compressor, Natural Gas & Diesel Fuel Supply System, EDG, Fire and Gas Detection System etc.

Dates : From Nov. 2008 till Apr. 2009

Employer : ABB Engineering Technologies KSCC, KUWAIT

Project: DOHA EAST POWER STATION: ABB DCS PRO CONTROL P14 Upgrade

of the hard wire Electrical Relay control system (DCS retrofit)

Job title : Instrumentation & Control / Design / Commissioning Engineer

Dates : From Apr. 2004 till Oct. 2008

Employer: Cairo Electricity Production Co. (CEPC), Cairo, EGYPT

Project: 660MW Thermal Power Plant Units 5, 6 Cairo West Power Station

Job title : Instrumentation & Control Maintenance Engineer

Job Description : • DCS: ABB PRO Control P14.

 Steam Turbine: Siemens MCR: 357MW, Control System AS 220 EA STRUK L Automation systems, AS 220 EHF fail safe system with OS 250 for protection, ISKAMATIC (A, B, C).

• Steam Boilers: HITACHI MCR: 1030 T/Hr, Main Steam Pressure 175 bars. NG & HFO Firing Systems.

• BOP System: BFWP with Woodward speed control, Demineralization Plant, Instrument Air Compressor, Natural Gas & Diesel Fuel Supply System, EDG, Fire and Gas Detection System, etc.

Dates : From Jul. 2003 till Mar. 2004

Employer: Cairo Electricity Production Co. (CEPC), Cairo, EGYPT

Project: 1260MW Thermal Power Plant SOHUBRA EL-KHEIMA Power Station

Job title : Operation Engineer

Job Description : • DCS: PLC & Hardwire Relay Control. Emerson WDPF as Monitoring

Program.

Steam Turbine: WESTINGHOUSE MCR 340MW.

• Steam Boilers: HITACHI Steam Boilers: (MCR: 1000 t/hr), (Main Steam Pressure 170 bar) and Natural Gas & Fuel Oil Firing Systems.

BOP System: BFWP, Demineralization Plant, Instrument

Compressor, Natural Gas & Diesel Fuel Supply System, EDG, Fire and Gas Detection System etc.

Dates : From Jul. 2001 till Jun. 2003

Employer : Army Aviation Group, Cairo, EGYPT

Job title : Communication Engineer

Further experiences:

Dates : From May 2008 till Oct. 2008 (part time)

Employer: Power System Projects PSP (Consultant), Cairo, EGYPT

Project: El-Tebeen Power Station

(Instruments Engineering of the Boiler, Power Cable & Pneumatic Devices)

Job title : Instrumentation & Control Design Engineer

Dates : From Oct. 2005 till Nov. 2005 (part time)

Employer: Electro-Thrawat as Sub-Contractor from EMERSON

Project: 900MW Thermal Power Plant (Siemens steam Turbine 2x150, 2x300MW)

(Attakka POWER STATION: Emerson DCS Ovation Upgrade of the hard

wire Electrical Relay control system (DCS retrofit))

Job title : Instrumentation & Control Commissioning/Start-up Engineer

Field of experience:

- Proficient in Commissioning and Maintenance of Combined Cycle Power Plant Instrumentation and Control especially on Siemens Steam Turbine, Siemens SGT5 8000H & SGT5-4000F Gas Turbine.
- Knowledge and experienced in Distributed Control System and Turbine Controller System such as Siemens Power Plant Automation SPPA-T3000 (Engineering & Maintenance), Siemens Power Plant Automation (Tele-perm ME) and ABB PROCONTROL P14.
- Capable of operating and maintaining different Power Plant auxiliary system, such as Gas and diesel fuel oil receiving facilities, Gas Compressor, Instrument Air Compressors, Water and Steam System, Continuous Emission Monitoring System (CEMS), Auxiliary Boilers, Electrical system, Fire and Gas Alarm System and other plant utilities.
- Direct experienced in maintaining and calibration of different type of field Instruments and final control elements such as pressure, flow, level, temperature, Ph, conductivity, dissolved oxygen, gas chromatograph, CEMS Analyzers, solenoid valves, E/P, E/H valve controller, motor

- operated valve, etc.
- Work Skills: Thermal and Combined Cycle Power Plant in I&C Design, Erection, Commissioning and Maintenance, DCS, Instruments, Control, PLC, Server skills, Networking skills, Computer Skills, Leadership Skills, Work Skills, Time Management and Research Skills.