

**100082-ICX-CMOS-E-1993**  
**I&C Commissioning Deputy Manager**

Holds a B. Sc. in Instrumentation & Electronics Engineering and has about 22 years extensive hands-on experience in project/site management, consultancy, design, commissioning, construction and maintenance within Thermal/Combined Cycle Power & Desalination plants, LNG, Water/waste water plant and Industrial automation. Possessing a thorough knowledge in all aspects of Control and Instrumentation.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 02/01/1970  
Gender : Male  
Marital Status : Married  
Residence : Currently Dubai, UAE

## EDUCATION

: B. Sc. in Instrumentation & Electronics Engineering, 1993

## LANGUAGES

Arabic : Native Language  
English : Good  
Italian : Basics

## COMPUTER SKILLS

: Windows, MS Office, Internet  
: AutoCAD 2008, Smart draw 2010, CADWorx Plant, P&ID 2006  
: MS Project, MS Visio  
: Visual Basic, Digital VAX & UNIX OS  
: MAXIMO 6.2, SAP 7.10, MP-2 (DataStream), Availability Workbench (AWB) simulation maintenance software's

## TRAINING COURSES AND CERTIFICATIONS

: Machinery Vibration & Condition Monitoring for Non-Vibration Engineering, Maintenance & Operations Professionals, HAWARD Technology, Dubai (1 week in 2013).  
: Alstom control System Alspa P320 using Controcad SW engineering and system enhanced maintenance, Alstom, Dubai (4 weeks in 2013).  
: Plant management system (Optimal load distribution and on line determination of efficiencies), STEAG Energy services GmbH, Dubai (3 days in 2011).

- : Siemens SPPA-T2000 DCS Teleperm XP system, Maintenance and administration, SIEMENS, Dubai (4 weeks in 2011).
- : Siemens S7-TIA course ST-PRO1-S7300/400PLC, Simatic manager, WinCC, program structure, Data Management, and Troubleshooting, SIEMENS, UAE (2 weeks in 2011).
- : Creative problem solving & decision making, SPEARDHEAD TRAINING, Dubai (2 days in 2010).
- : Project Management for Automation Engineers (MT10C2), Sites Power Institute, Dubai (1 week in 2010).
- : Siemens SPPA-T2000 Plant Network Configuration, Maintenance & Troubleshooting, SIEMENS, Dubai (2 days in 2010).
- : Siemens SPPA-T2000 Fail safe system Configuration, Maintenance & Troubleshooting, SIEMENS, Dubai (1 week in 2010).
- : ISA Certified Automation Professional (CAP), Online Distance Learning Program, 6 months (May 2009).

At DEWA – UAE:

- In house training on Risk Assessment, 1 day (2009).
- Alstom P320 Alspa control System using Controcad software engineering workshop system Configuration, Maintenance & Troubleshooting, 2 weeks.
- Siemens SPPA-T2000 Plant Network Configuration, Maintenance & Troubleshooting, 4 days.
- Siemens SPP –T2000 Fail safe system Configuration, Maintenance & Troubleshooting, 2 days.
- Siemens S7300/400 PLC, Simatic manager, WinCC, Basic Operation, program structure, Data Management, Program documentation, backup and Troubleshooting, 1 week.
- : Training course for T3000 DCS system (maintenance, administration and configuration), Siemens PG – GERMANY (Feb./Mar. 2007).
- : Safety Awareness Course in Petroleum Industry through SMTC Global, 1 week (2005), SEGAS Egypt.
- : At Cairo Electricity Company:
  - Training course for Power Plant Equipment and Systems Theory and Application (from Jan. till May 2001).
  - Training course for operation of Power Plant units in hot and cold start conditions (Mar. 2002).
  - Training course for Operation of the Units at black start-up (Apr. 2002).
- : Training course for Operating & System Manager (Contronic M system), Elsag Bailey Hartmann and Braun, Mirfa Power and Desalination Plant – UAE (10 days in Feb. 1998).
- : Training course for SchmvlvSizer software, valves design, sizing and control valves (Schmidt Armaturen GmbH), Italimpianti Spa Abu-Dhabi office – UAE (Apr. 1999).

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jan. 2012 till now  
**Employer** : Dubai Electricity & Water Authority (DEWA) – Dubai

**Project** : Jebel Ali M Combined Cycle Power & Desalination Plant:  
6 units Siemens V94.3a gas turbines, HRSGs/Aux. boiler (427 t/h, 480 t/h each, NEM), 8 Desalination units 140 MIGD Multi-Stages and 3 Steam turbines (200MW each) ALSTOM.

**Job title** : I&C Comm. Deputy Manager

**Dates** : From Sep. 2008 till Dec. 2011

**Employer** : Dubai Electricity & Water Authority (DEWA) – Dubai

**Project** : Jebel Ali LII Combined Cycle Power & Desalination Plant:  
4 Siemens V94.3a gas turbines (200MW each), 4 supplementary fired HRSGs (420 t/h each, NEM), one auxiliary boiler (480 t/h, NEM), 4 Desalination units each 6.4 Million Gallon/Day Multi-Stages Flash Distiller (FISIA Italmimpianti Spa) and 2 Steam turbine (200MW each) ALSTOM. The control & protection systems are Siemens Symadyn D & S5 95F, Siemens TXP DCS, ALSPA Steam Turbine Controller P320 – TGC and Siemens SIMATIC S7300/400.

**Job title** : Senior I&C Comm. Engineer (Acting as Deputy Manager)

**Dates** : From Mar. 2006 till Aug. 2008

**Employer** : SIEMENS PG

**Project** : Shoubra El-Kheima Power Plant:  
4 units 315MW Steam turbine (Westinghouse) 1000T/H boiler (Ansaldo)

**Job title** : Project Site & Commissioning Manager

**Dates** : From Jul. 2000 till Feb. 2006

**Employer** : Cairo Electricity Company

**Project** : Shoubra El-Kheima Power Plant:  
4 units 315MW steam turbine (Westinghouse), 1000t/h boiler (Ansaldo)

**Job title** : Senior I&C Maintenance Engineer

**Dates** : From Jan. 1996 till Jun. 2000

**Employer** : Elsag Bailey Hartmann and Braun GmbH & Co. KG – UAE

**Projects** :

- Al-Taweela Power and Desalination Plant:
  - 6 units each 122 MW (Extraction mode), 147MW (Condensation mode), Steam turbine ABB –KG 650T/H Boiler Babcock Germany, 12.7 Million Gallon/day Multi-Stages Flash Distiller (Italmimpianti Spa).
- Mifra Power and Desalination Plant:
  - 4 power units, 3 distillers each, 48MW Gas turbine (Siemens v64), WHRB 16 Bar /224 c (Ansaldo Spa), 5.4 Million Gallon/day Multi-Stages Flash Distiller (Ansaldo Spa).

**Job title** : I&C Commissioning Engineer

**Dates** : From Jan. 1995 till Dec. 1995

**Employer** : HAK Process and Automation with ABB Automation Germany

**Project** : Sugar Production and Sugar Refinery Plants in Iran

**Job title** : I&C Design & Commissioning Engineer

## Further work experiences:

EGYPTROL (part time from Nov. 2004 + 2 months in 2002),  
I&C Design & Commissioning Engineer:

- For U.S. Brigade compound (Military Training Facilities - Afghanistan) fuel oil plant:
  - Design the plant engineering (field elements, logic diagrams, field wiring and test of the control cabinets).
  - Pre-commissioning of plant wiring to the plc and calibration all the final control elements.
  - Commissioning of plant control and start-up.
- Oman RO Plant Engineering.
- Abu Qir Power Plant, water treatment plant upgrade.

ABB Instrumentation Division (USA) & ABB Susa (2 months in 2003),  
I&C Commissioning Engineer:

- Aswan water and waste water treatment plants:
  - Commissioning of all control elements (transmitters, valves, analyzers).
  - Commissioning of Allen Bradley Micrologix 1000 system.
  - Maintenance of the plant during guarantee time.
- Beni Suef wastewater treatment plant:
  - Commissioning and start-up.
- Beni Suef, El-Menia water treatment plant:
  - Commissioning and start-up.
- General Electric:
  - Low voltage MCC series 9000 and low voltage Power Circuit Breakers testing.

EMC (Egypt Maint. Co. San Maser)

6 months in 2004 + 2 months in 2004/2005,  
I&C Maintenance Planning Engineer:

- Damietta LNG project:
  - Develop and implement an effective I&C/Electrical preventive maintenance program for the Plant facilities. Determine the types and frequency of tests and inspections (6 months in 2004).
  - Implement, monitor and control maintenance plans / procedures during plant shutdown (2 months in 2004/2005).

Foxboro (Advance system)

1 month in 2006, I&C Commissioning Engineer:

- Commissioning and start-up of IBSF 100 t/h Boiler in Syria.

**Field of experience** : Projects, Site Management, Consultancy, Design and Commissioning Responsibilities and Achievements:

- Successfully launched detailed Feasibility Studies for new and Migration automation systems and instruments projects.
- Cover all the automation project engineering aspects including operator interface, continuous control, field devices, I/O's assignments and integration with external systems.
- Supervised the implementing of instruments data base /KKS lists, scope of work, typical drawings and Preparation of I&C engineering deliverables for different automation projects.
- Designed DCS Systems hardware configuration, logic, control functions

and Developed the functional description of the automation tasks (e.g. control scheme, plant sequence control, alarms, HMI, reports) using established rules in the definition stage.

- Participated in the creation of different Automation project phases (Planning, Scheduling, Execution).
- Implemented, improved Work and Quality plans for erection and commissioning phases. Monitored the performance of erection and commissioning activities plans and minimized deference between actual progresses against plan.
- Supervised DCS/control systems Factory Acceptance test (FAT) and Site Acceptance test (SAT) for Siemens DCS system SPPA-T3000/Germany and Yokogawa CS 300 systems.
- Supervised erection and performed physical inspection of installed equipments against construction drawings to ensure installation in accordance with design drawings and specifications. Selection and technical evaluation of the equipments/instruments (including Safety Instrumented System, SIL, Intrinsically Safe and Explosion Proof) to be installed/procured in compliance with engineering standards and codes applicable for I & C like IEEE, ISA, API, ANSI, IEC.
- Prepared Resource Assignment for different project task plans.
- Participated in HAZOP study for the LNG plant during the project design phase.
- Planned Spare parts procurement for I&C systems and consumables as per contract specifications.
- Prepared the daily, weekly and monthly construction, commissioning progress report for project manager and head office.
- Prepared the project schedule (construction and commissioning) with the project manager and all the preparation arrangements before project schedule starting.
- Prepared and reviewed all project documents, Technical submittal Drawing, FAT/ SAT/ RFI reports, Risk assignment, Safety reports and store material inspection MRR.
- Reviewed commissioning test plans and reports.
- Prepared project handover documentations.
- Performed plant logics configuration tests in accordance with the design documents by executing the test plan to verify that the systems operate as specified.
- Installed all the necessary systems adjustments using applicable tools and techniques to demonstrate system performance and turn the automation systems over to operations.
- Prepared, customized and reviewed erection documentations like instruments Hookups – process piping, air piping hook-ups, electrical installation, Instrument mounting details, cable schedules, overall cable tray routing, instrument field layouts F & G layout, Instruments Junction Box wiring details and location Plan, plant Automation function and loop diagrams. Finalized and reviewed project As Built documents.
- Prepared hot and cold function tests for Individual Drive Logic control (Protection and Interlocks), Sub-Functional Group (FSG), plant Function Group (FG), Parammetrizing / tuning of Closed Loops Control, Unit Coordinator, I/Os and Analog / Digital signals on DCS / control systems. Implemented the required modification during final tuning.
- Prepared specification data sheets for various field instruments Smart

Transmitters/Switches (Pressure, Level, Flow Temperature, etc.), Gas Detection Systems, sizing calculation for valves, actuators, Safety Valves, Orifice plates and Flow Nozzles. Floated Specifications to vendors and sub contractors and evaluated technical / financial offers.

- Participated in Pre-commissioning, Commissioning and troubleshooting of instruments loops and DCS/Control systems, field instruments:
  - Analyzers Instruments Chemicals and gas (Ph, Conductivity, O2, CO, CO2, Chlorine, clo2, Turbidity, H2, O2, CO, CO2, NOX, ...).
  - All Field Transmitters/switches-(Level, density, flow, pressure, Temp ...).
  - All types of Control and on /off valves (pneumatic /motorized / hydraulic), part turn/linear actuators.
  - All pumps (all instruments used for controlling MV pumps).
  - All Electromagnetic and Ultrasonic transmitters (flow or level).
  - All types of vibration, speed, reverse rotation sensing instruments.
  - All types of field calibrators and hart communicators.
  - Etc.
- Selected as Member of DEWA cyber security Committee (2013-2014) to review and recommend Cyber security policies, budget and programs as per ISA/IEC-62443 (formerly ISA-99) standard to support DEWA in its mission.
- Nominated for DGEP (Dubai government excellence program) DEWA generation division Distinguished Technical/Engineering Employee category.

#### Maintenance Responsibilities:

- Reviewed the Gathered I&C information (field instruments and control systems) and generated I&C database, maintenance management plans (corrective, preventive and overhaul for field instruments and control systems). Scheduled, implemented maintenance backups plan and reported functions to meet the plant functional requirements and maximize availability.
- Reviewed work instructions of critical maintenance activities to ensure safe plant operation during critical activities execution.
- Utilized Availability Workbench simulation program for developing and maintaining a Reliability-Centered Maintenance (RCM) program, performed full system availability predictions taking into account complex dependencies on spares and other resources. Performed a Life Cycle Cost Analysis.
- Identified and diagnosed unforeseen, foreseen, repeated problems and Common Mode Failure studies for the plant I&C main and subsystems using troubleshooting skills and structured methodology .Submitted the solution proposals (modifications, equipments change, etc.), cost and plan to the higher management level for execution approval.
- Planned Spare parts procurement (optimum spare holdings) and annual budgets for I&C systems and consumables.
- Managed instrument maintenance team on daily basis. Planed and scheduled preventive maintenance and plant overhaul for turbines/boilers, LNG plant and desalination plants.
- Programmed and developed in house training courses for I&C engineers and technicians.
- Supervised Maintenance and troubleshooting activities of different Control system DCS's, PLC's and LCP's.
- Determined the frequency tests and inspections of instruments and

control system.

- Developed and implemented an effective I&C / Electrical preventive maintenance program for LNG Plant facilities.
- Conducting TBTs for the DEWA generation ISO procedures, updating/renew quality procedures as per new ISO requirements.
- Reviewed the final results of Residual Life Assessment (RLA) reports of control systems thereby assisting in taking decisions for Running, Repairing, stock increasing or Replacement to Minimized Outage Losses-Plant tripping and forced outage.
- Reviewed the risk assessments to provide an improvement in the level of worker protection and prevention of occupational risks.

Electrical (Aswan cities / Bani Suef / Elmenia water and waste water treatment plants):

- Participated in Commissioning and Testing GE LV- MCC series E9000 and low voltage Power Circuit Breakers.
- Participated in Commissioning and Testing GE MV- MCC series Limitamp AR.

Technical Knowledge of field instruments & Automation System:

- Siemens:
  - SPPA-T3000 DCS system, SPPA-T2000 DCS (TELEPERM XP), Symadyn D & S5 95F and S7300/400 PLC, Simatic manager, WinCC.
- Elsag Bailey H & B:
  - DCS systems Contronic 3, Contronic E, Contronic P, Contronic M and Freelance2000, Industrial controllers Digitric 500, Protronic, Btronic series.
- Yakogawa:
  - Advanced DCS control system CS 3000.
- Alstom:
  - Alspa P320 turbine control system.
- Machine Monitoring Sys:
  - Bently Nevada 7200/3300 systems.
  - EPRO 3000/6000-Vebrometer VM600 system.
  - Siemens SPPA-D3000 VIBROCAM 5000 Machinery Analysis system.
- GE Energy:
  - Speedtronics MARK VI.
- Allen Bradley:
  - Micrologix 1000 PLC and RS LOGIC 500 system.
- Fire and Gas systems:
  - MSA Auer SUPREMA Fire and Gas Monitoring Unit.
- SCADA & HMI system Micrologix 1100 PLC, RS LOGIC 500 system, Wonderware HMI/SCADA and WinCC.
- Analyzer Instruments Chemical (Ph, Conductivity, O<sub>2</sub>, CO, CO<sub>2</sub>, Chlorine, Turbidity and Hydrogen) Gas Analyzers.
- ABB, E&H, Rosemount, Hack, Siemens, Kinck, etc.
- All Field Transmitters - Level, density, flow, Temp, etc.
- All types of control and on/off valves (pneumatic / motorized / hydraulic), part turn/linear actuators.
- All pumps (all instruments used for controlling MV pumps).
- All Electromagnetic and Ultrasonic transmitters (flow or level).
- All Local gauges & Switches.

- All types of vibration, speed, reverse rotation sensing instruments.
- All types of field calibrators and hart communicators.