101636-ICX-1CMS-E-2004 I&C Engineer

Holds a B. Sc. in Computer & Control System Engineering and a Diploma in Control System. Has about 15 years hands-on experience working as I&C Engineer at Power Plants.

PERSONAL DATA

Nationality : Egyptian Birth Date : 24/05/1982

Gender : Male

Marital Status : Married

Residence : Damietta

EDUCATION

 B. Sc. in Computer & Control System Engineering, Mansoura University, 2004

: Diploma in Control System, Mansoura University, 2010

: Studying for Master's degree in Control Engineering, Mansoura University,

from 2015 till now

LANGUAGES

Arabic : Native Language

English : Fluent
German : Basics
French : Basics

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet

: Linux

: Frontpage

: Sql & Oracle Database

TRAINING COURSES AND CERTIFICATIONS

: Simatic course for Siemens plcs S7- 300 & 400 (Mar. 2019).

: SFC training course: Training in Germany on static frequency converter and excitation for Siemens gas turbine.

: T3000 training course: Training in Germany and Damietta Power Station on T3000 control system used on gas turbine (new update).

: ABB training course: Training in Damietta Power Station on AC800M plc and pgp software.

: Operation of gas turbine 135MW Siemens.

: Operation of steam turbine 145MW Alstom.

: I&C training course for deal with Maintenance of auxiliary and boiler related to combined power station. Control system and instrument of a gas turbine (Closed and open loop control system), Damietta Power Station.

GE training course: Training in substation automation system & telecommunication system. Training in Yokogawa DCS centum vp

engineering.

: Sql & Oracle Database courses from Almasria Company for Database.

: Microcontroller course from Mansoura University.

: PLC course from Mansoura University.

4 months in operation & maintenance of Combined Power Station, Damietta Power Station.

: Training on 776 system and china Linux system.

: Internet and Email professional.

: Taking courses in German language first level.

: Training in Damietta Port:

Microcontroller PIC16F8XX programming.

 Computer parallel & serial ports handling especially for control digitally machines.

• Installing maintaining network.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Apr. 2005 till now

Project: Damietta Combined Cycle Power Station

(6 gas turbines type Siemens SGT5-2000E (V94.2) – 6 HRSG manufactured by Borsig Germany – 3 Steam Turbines GEC ALSTHOM in the combined

cycle and 4 gas turbines type GE Frame 9E in simple cycle)

Job title : I&C Engineer

Dates : 2016

Employer: EGYPTROL, SIEMENS AG Subcontractor

Project : Al-Burullus Power Station

(8 gas turbines type Siemens SGT5-8000H - 8 HRSG manufactured by

nemo Germany – 4 Steam Turbines in the combined cycle)

Job title : I&C Engineer

Job Description : Working on commissioning of the last version turbine of Siemens (SGT5-

8000H) in Al-Burullus Power Station, 8 units.

Further experiences: Doing the commissioning of 6 units Siemens gas turbine since 2014.

Field of experience: • 15 years experience in commissioning, maintenance:

Siemens Gas Turbine (SPPA T3000) V (94.2).

DCS (Emerson) Ovation.

- Steam Turbine (ABB) combined cycle power plant.

Water treatment.

- Experience in T3000 from working in Al-Burulus Power Station last version turbine of Siemens (SGT5-8000H).
- GE Gas turbine frame 9, Mark 6E control system.
- Summary of skills:
 - Experienced in the field instruments and control systems procurement activities.
 - Engineering, commissioning and maintenance activities for DCS, PLC, SCADA, Analyzers and Control Loops.
 - DCS: Siemens SPPA T3000, EMERSON.
 - SPPA R3000 with Siemens gas turbine SGT5-2000E (V94.2), Siemens SGT 5 8000H Gas Turbine.
 - GE MARK VIE with GE 9E gas turbine.
 - PLC: Siemens simatic (S7 300, 400, LOGO) ABB AC800M), DELTA DVB EH.
 - Installation, calibration and Configuration of the field instruments (Emerson Rosemount, ABB, Endress & Hauser, Bentley Nevada, Honeywell, Yokogawa, ...).
 - Maintenance and calibration of the control valves (Pneumatic, hydraulic) of Weir, WOODWORD, ACTREG, Auma and Alfor
 - Dealing with sensors, switches, transducer (i/p) with adjust them Specially Siemens valves (blow off, pilot, diffusion, premix).
 - Atlas compressor (atlas copco).
 - Fuel oil treatment plant (separator system).
 - Commissioning, maintenance and testing of fire extinguishing systems SANCO minimax FMZ4100 and from others and also Co2 and dulogue fire system.
 - Familiar with flow meters configuring (electromagnetic, Diffipressure, ultrasonic, turbine, vortex, coriolis) of E+H and Rosemount.
 - Designing, Implementing and Commissioning of new control loops as per site requirements.
 - Strong background in motor defects, soft starters, drives, star/delta starters, VFD, MCC.
 - Printed circuit boards PCB Repairing, and Modifying.
 - Technical Support for the instrumentation team.
 - Spares balance investigation and inventory control for all instruments' spare parts.

Work experience:

- Maintenance Engineer position in gas turbine (v94.2) units and gain a good experience in using SPPA T3000 by: Use workstation features (alarm viewer, trender, watch window, live view) to analysis and troubleshoot problems.
- Handling and replacement procedure for defected system devices like terminal boards, IO packs, Switches and controllers.
- Oversee calibration, configuration and troubleshooting of field instruments.
- Network (Ethernet, Modbus, profibus, OPC, Fiber Optics and RS485).
- The Task of T3000 I have experience is:
 - For Damietta Power Station:

Participate in the upgrade for 6 SIEMENS gas turbines from Teleperm ME to SPPA T3000 and this include the following tasks:

- Power up CRY cabinet, review the network, configure XEN server.
- Review CJR cabinet, power up, perform commissioning for S7 416-5h automation server with FM458 and fail safe.
- ❖ Upgrade the licence for T3000 and Upgrade the firmware for S7 CPU and CP443-1.
- Check the Profibus communication between automation server, FUM racks, ET 200M, ADDFEM fast I/O, Profisafe flight recorder and SFC/SEE system.
- Export the project, import it in another group, do copy and modify.
- Perform loop check to verify all signals after remove old system. DO function test and take the necessary action to solve any troubles.
- ❖ I share with design new plant display for monitor T3000 hardware (SCALANCE, Application server, time server and UPS) using management proxies.
- Familiar with failsafe system engineering requirement and diagnosis.
- ❖ Familiar with engineering requirement for Turbine governor FM458.
- Familiar with using of T3000 system analysis tools (alarm sequence display, diagnostic view, Simatic manger and SPPA T3000 admin console) to verify the quality and the system healthy.
- Perform tests for all T3000 components (automation server with fail safe, FM458, ADDFEM, ET200M and FUM system and optical switch modules SCALANCE to validate the redundancy.
- Develop, implement and review a preventative maintenance system including monitor equipment availability, recommend on spare holdings and oversee maintenance operations so to meet production objectives.
- Assist in the promotion of a positive safety culture so that safety is main priority.
- Perform planning, scheduling and implementing maintenance management system using CMMS.
- For Al-Burullus Power Station:
 - ❖ It is the same like Damietta Power Station but with big machine and a big instrumentation tools for example Siemens use Hydergine for cooling generator and use its circuit like (MKG, MBA,) turbine temperature and outlet temperature calculated but for I&C senior its easy to deal with.
- Other experience in Damietta Power Station:
 - Sfc and excitation maintenance.
 - Self-cleaning (plc by Allen Bradley).
 - Dust collector system (plc by Hitachi)
 - Software (symadin D struc I, teleperm me, T3000) of the gas turbine units.
 - Work also for water treatment area and perform maintenance stuff

- like as: calibration for of ph, chlorine, oxygen, conductivity, silica and sodium devices.
- Maintenance pneumatic & hydraulic & electric actuator in water treatment unit.
- Work on old system plc by Allen Bradley for demi water lines.
- Work also on BORSIG HRSG boiler and maintenance the pneumatic actuator, damper, transmitters.
- Software (OVATION) from Emerson Company:

Responsible for DCS as shown:

- Participate in upgrading for steam turbine Governor to ABB AC800M.
- Maintenance & calibration of transmitters PT, LT, TT, DPT (Rosemount, Yokogawa, Vega, Foxboro, Honeywell,).
- Maintenance & calibration of steam turbine governor control system, and Bentley Nevada 3500 measuring system (Velocity, Thrust, Vibration, Differential expansion, absolute expansion,).
- Supervising all I&C maintenance activities during shutdown and normal operation of the steam turbine and HRSG include pressure transmitters, level transmitters, flow transmitters, LVDT for control valves and bypass valves, pressure switches, level switches, flow switches, pneumatic valves, hydraulic valves, AUMA electric actuator.
- Participate in gas turbine inspection during shutdown.
- Design a new control system for instrument and service air compressors by using Simatic logo.