## 100746-CSX-45MSix-E-2011

# Instrument Commissioning & Start-up Area Supervisor

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 9 years hands-on experience working in I&C maintenance, commissioning and start-up.

#### PERSONAL DATA

Nationality : Egyptian
Birth Date : 24/01/1989

Gender : Male
Marital Status : Married
Residence : Gharbia

### **EDUCATION**

B. Sc. in Electrical Power & Machines Engineering, Tanta University, 2011

#### LANGUAGES

Arabic : Native Language

English : Good

# **COMPUTER SKILLS**

: Windows, MS Office, Internet

: Matlab: AutoCAD: Dialux: ETAP

# TRAINING COURSES AND CERTIFICATIONS

: PLC advanced course.

: Power system distribution course.

: Power system protection course.

: Training at Cairo Oil Refining Company, Tanta Laboratory (from Jul. till Sep. 2009): studying and knowing how to make a control system using PLC and other control instrument.

: Training at Generation Power Plant (from Jul. till Sep. 2010): understanding the configuration of power system and studying the protection system of the various parts of power.

: ICDL

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2016 till Jun. 2020 Employer : GS Engineering & Construction

**Project**: ERC Refinery Project

Job title : Instrument Commissioning & Start-up Area Supervisor

**Job Description** 

- Perform commissioning testing activity such as Instrument Loop Testing (Single Loop, Complex Loop, Fire and Gas Loop), Function Testing (Cause & Effect, DCS and ESD function test) and testing for several packages such as Fuel Gas Compressor package, Instrument Air Compressor package, Chemical Injection package, Steam Boiler package.
- Perform commissioning & start-up of 6 number of heater (DHT reactor feed heater, NHT reactor feed heater, splitter re-boiler heater, NHT stripper re-boiler, Delay cocker unit heater and reformer stabilizer reboiler heater) and troubleshooting all problem related to them (heater control panel, heater ignition panel, flam feedback system, ignition system and stack damper configuration and calibration).
- Perform commissioning & start-up of 15 number of gas compressors (2 no of NHT recycle gas compressor, 2 no of HYDROGEN rich gas compressor, 2 no of NITROGEN gas compressor, 2 no of regeneration loop compressor, 2 no of DHT make up compressor, 2 no of DHT recycle compressor and 1 no of REFORMER recycle gas compressor).
- Perform commissioning & start-up of hydraulic decoking system and coke handling system in DCU.
- Perform Commissioning and Troubleshooting of various Field Instrument such as Pressure Transmitter, Temperature Transmitter, Level (DP, Radar), Flow (DP, corilios, vortex, magnetic & Ultrasonic), Vibration Transmitter (accelerometer, velocity & displacement), Fire and Gas (HGD, FGD & TGD), Control Valve, Shut Down Valve and Blow Down Valve.
- Perform commissioning & start-up 3 no of BABCOCK-HITACHI boilers (90 tons of steam per hour) and having good knowledge in Burner Management System (BMS), Oil and Gas Fuel system and troubleshooting of boilers.
- Responsible for Calibration and Functional Checks of all types of Smart Instruments, Sensors and Final Control Elements.
- Commissioning of Emergency shutdown valves (on-off) with PST Operation and performing partial stroke configuration.
- Performed Cause and Effect Test to ensure all F&G logic, DCS logic and ESD logic are well function before turn-over to the client and Provide effective troubleshooting during loop test and logic test.
- Assist start-up and operation activities, including troubleshooting and function test of instruments to confirm the logic perform as per the system description and operation philosophy and to document the testing is complete.
- Review engineering and vendor document such as P&ID, hook up drawings, Control system philosophy, cause & effect, loop drawings, Cause and Effect Diagram, Sequence Logic, I/O List, Alarm Index, Data Sheet, Instrument Loop Diagram, Wiring Connection List and Cable connection Schedule.

- Perform walk down inspections on the handed over subsystems that are ready for commissioning.
- Create a punch lists related to mechanical, electrical and instrument installation that didn't comply with the relevant hook up drawings, PIDs, process and control philosophy.
- Prepare progress reports for project management review, describing item work-off, loop check count completion, logic check progress and activities planned next week.
- Coordination and supervision of Construction support activities during the performance of the pre-commissioning and commissioning activities.
- Inspect, test and troubleshoot electrical equipment motors, starters, breakers, transformers, isolation switches, relays, AC Drives, electrical cable and heaters control panels.
- Extensive knowledge and experience of Switchgear, Motor control centers, Transformer, Standby diesel Generator, UPS and earthling.
- Prepare electrical equipment specifications, data sheets, control philosophy and substation equipment layouts.
- Performing electrical calculations and studies such as short circuit, load flow, voltage drop, reactive power capability, cable sizing, fuse sizing, and relay coordination.
- Having experience on working in 6.6KV/11KV medium voltage operations Switch gear with Schneider motor protection relay (MICOM P242, P243).
- Having good experience in using fluke 724 temperature calibrator, druck geni DPI620, druck DPI611 generator, 475 field communicator, flucke 179 true RMS multi meter and MA Calibrator.

Dates : From Apr. 2014 till Apr. 2016

**Employer** : Pharonic Petroleum Company / Enppi

**Project**: Port Said

Job title : Instrument Commissioning & Start-up Engineer

**Job Description** 

- Perform Commissioning and Troubleshooting of various Field Instrument such as Pressure Transmitter, Temperature Transmitter, Level (DP, Radar), Flow (DP, corilios, vortex, magnetic & Ultrasonic), Vibration Transmitter (accelerometer, velocity & displacement), Fire and Gas (HGD, FGD & TGD), Control Valve, Shut Down Valve and Blow Down Valve.
- Responsible for Calibration and Functional Checks of all types of Smart Instruments, Sensors and Final Control Elements.
- Commissioning of Emergency shutdown valves (on-off) with PST Operation and performing partial stroke configuration.
- Performed Cause and Effect Test to ensure all F&G logic ,DCS logic and ESD logic are well function before turn-over to the client and Provide effective troubleshooting during loop test and logic test.
- Review engineering and vendor document such as P&ID, hook up drawings, Control system philosophy, cause & effect, loop drawings, Cause and Effect Diagram.
- Sequence Logic, I/O List, Alarm Index, Data Sheet, Instrument Loop Diagram, Wiring Connection List and Cable connection Schedule.

Dates : From Dec. 2011 till Mar. 2014

**Employer** : El-Arish Cement Factory

Job title : Instrument Maintenance Engineer

Job Description : • Carry out mainten

• Carry out maintenance & calibration work of all types of field instruments such as temperature, pressure, level and flow transmitters.

- Carry out maintenance & calibration work of vibration sensors (displacement, velocity and acceleration) BENTLY NIVADA product type.
- Installation, calibration and loop checking of the field instruments (Emerson Rosemount, ABB, Endress & Hauser, Bently Nevada, Honeywell and Yokogawa.
- Experienced in flow meters configuration (electromagnetic, orifice plate, ultrasonic, vortex, mass flow meter and coriolis flow meter).
- Carry our maintenance and calibration of gas detectors (FGD, HGD and TGD).
- Maintenance and calibration of pneumatic control valve (fisher, metso and Flowserve) and performing partial stroke configuration for shutoff valve.
- Review of control philosophy, P&I diagrams, cause & effect diagrams, instruments I/O list and flow chart.
- Review vendors' documents, maintenance manuals and spare parts lists.
- Proficient ability to understand control philosophy and write functional requirement specifications based on expected functionality including description of control loops, interlocks and alarms.
- Working experience on rotating equipment especially steam turbine and compressors.