105908-ICX-1CMOS-E-1995

Lead I&C Maintenance Engineer

Holds a B. Sc. in Electronics & Communications and has in depth experience in facilities instrumentation and control construction, commissioning and maintenance is cumulated from 25 years of experience in power generation projects.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 09/07/1967

Gender : Male
Marital Status : Married
Residence : Giza, Cairo

EDUCATION

B. Sc. in Electronics & Communications, Helwan University, 1995

High Institute of Medical Devices and Equipment's in Cairo, 1988

LANGUAGES

Arabic : Native Language

English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Training Course in KSA: 7EA GE Gas Turbine testing (Jun. 2012).
- : Basic course of the Operation of Steam Power Stations, Egyptian Operation and Maintenance Company.
- : Training Course in Egypt: Emerson Ovation control System (Apr. 2009).
- : Training Course in JAPAN, HITACHI Ltd. (Nov. 2008):
 - Maintenance & testing training program of steam turbine generator and auxiliary.
 - Maintenance & testing training program of turbine control system (GE MARK VI) TCP & turbine supervisory instrument (BENTLEY 3500).
- : Training Course in Egypt: CMI HRSG O&M training (May 2008).
- : Training Course in Germany, SIEMENS PG (Jul. 2006):
 - Siemens gas turbine (V 94.3A) operation training.
 - Gas turbine electrical overview.
 - Gas turbine I&C overview.
 - Gas turbine mechanical.

TXP-2000 control system.

- : Training Course in Egypt: SIEMENS PLC testing & Maintenance (Jul. 2005).
- : Training Course in Egypt: Nubaria Power Station O&M training (Aug. 2004).
- : Training Course in Egypt: Talkha Power Station O&M training (Apr. 2004).
- : Training Course in Egypt: El-Kureimat O&M training of Combined Cycle Power Plant (Apr. 2003).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2019 till Dec. 2021

Employer : Upper Egypt Electricity Production Company (UEEPC)

Project: KUREIMAT II power generation are designed to include three power

modules - KUREIMAT II 750MW Combined Cycle power generation, two 250MW Siemens turbines (V94.3A) 2x250MW T3000 control system, Two HRSGs Skoda with (CMI) and (Emerson) Ovation DCS control system, Steam turbine generator (STG) 250MW (HITACHI with MARK VI control

system

Job title : Lead I&C Maintenance Engineer

Job Description: • All tests for Mark vi (TCP) & (TSI) steam turbine.

All tests for mark 6 (logic test, signal test).

• Calibration and loop check & Troubleshooting for all field instruments.

 Troubleshooting for gas turbines Siemens TXP3000 control system. And STG MARK VI control system.

Maintenance of Siemens S7-300 & 400 PLC for axillaries.

 Prepare and proceed the maintenance schedule as manufacture requirement.

Troubleshooting for Hydrogen generation system and Hydrogen analyzer.

Dates : From Aug. 2017 till Nov. 2018

Employer : GAMA

Project: PP13 - Power Generation Project – Riyadh, KSA

Combined Cycle, with 6 Gas turbines GE Frame 9EA (6x200MW), 6 HRSG's STF manufacture and 2 steam turbines GE (2x300MW) and YOKOGAWA DCS control system as well as GE Mark VIe for gas and steam turbine

control system.

Job title : Lead Control & Testing & Commissioning Engineer

Job Description : • Review construction completion and ensu

 Review construction completion and ensure readiness for precommissioning through review of equipment package. Check loop test method statements. Ensure safe work practices and monitor precommissioning task hazards communicating non-conformances to the execution crew and management intervening where necessary to avert escalation. Review design deliverables to ensure completion compliance to project design and company standards.

• Check for all I&C equipment, devices, wiring and panels for turbines. Follow the Calibration and doing the loop check for all field instruments.

 Wiring hot loop checks for TCP (panels, packs, boards, processors and communications).

Test mark vie and DCS control system (signal checks and HLC test).

- Check for all I&C equipment for BOP (WTP, ACP, fuel area, CCW, etc.).
- Testing for all valves (control, motorize, pneumatic and hydraulic valves).
- Clear all the Punch list, NCR's and WDR's for all related to I&C.
- Testing the supervisory instrument (BENTLY 3500).
- Hot Loop check for all PLC's and sub-control systems.
- Troubleshooting of the above systems regarding to defect report and punch list.

Dates : From Apr. 2014 till Aug. 2017

Employer: Arabian BEMCO

Project: PP10 Power Generation Project, Riyadh - KSA

40 Gas turbines GE Frame 7EA (40x60MW), 40 HRSG's NEM manufacture and 10 steam turbines GE (10x128MW) and GE DCS control system as well

as GE mark vie for steam turbine control system.

Job title : Lead I&C Testing & Commissioning Engineer (from Combined Cycle)

Job Description

- Review construction completion and ensure readiness for precommissioning through review of equipment test in. Ensure safe work practices and monitor commissioning task hazards communicating nonconformances to the execution crew and management intervening where necessary to avert escalation. Monitor equipment performance.
- Check for all I&C equipment, devices, wiring and panels for turbines and HRSG's.
- Wiring hot loop checks for TCP, HRSG's, DCS and local control system.
- All tests for mark vie and DCS control system (logic, signal and function test).
- Check for all I&C equipment for BOP (WTP, ACP, etc...).
- Testing for all valves (control, motorize, pneumatic and hydraulic valves).
- Clear all the Punch list, NCR's and WDR's for all Blocks related to I&C.
- Testing of turbine supervisory instrument (BENTLY 3500).
- GT control system modification for the combined cycle.
- Hot Loop check for all instruments for PLC's, HRSG's included DCS system.
- Troubleshooting of the above systems regarding to defect report and closing the punch list for all units.

Dates : From Dec. 2013 till Apr. 2014
Employer : Bechtel Company at Sirte - Libya

Project : Al Khalij Power Plant Project 4*x350MW Thermal Power Plant (steam turbine

Hitachi and Boiler of Doosan with DCS Ovation control system)

Job title : Lead E-I&C Testing & Commissioning Engineer

Job Description : • Monitor and report a works of

- Monitor and report a works contractor's site progress, safety performance with quality requirements and compliance with document submittal requirements.
- Participate in program review and coordination meeting with contractors.
- Assist contractor by providing data collection to support processing of work.
- Conduct all inspection in such a way as to ensure that work contractor minimize impact and prevent any spread or release of hazardous.
- Support to construction in addressing RFIs, verify NCR and WDR.
- Following and review all testing & commissioning procedures as per

contract and drawing and TOP as well.

 Attend function test inspection for each process system as per test procedure and control inter-lock test.

Dates : From Oct. 2011 till Dec. 2013

Employer: Arabian BEMCO

Project: PP10 Power Generation Project, Riyadh - KSA

40 Gas turbines GE Frame 7EA (40x60MW), 40 HRSG's NEM manufacture and 10 steam turbines GE (10x128MW) and GE DCS control system as well

as GE mark vie for steam turbine control system.

Job title : Lead I&C Testing & Commissioning Engineer (for Simple Cycle)

Job Description : • Review construction completion and ensure readiness for pre-

 Review construction completion and ensure readiness for precommissioning through review of equipment test in. Ensure safe work practices and monitor commissioning task hazards communicating nonconformances to the execution crew and management intervening where necessary to avert escalation. Monitor equipment performance.

- Check for all I&C equipment, devices, wiring and panels for turbines and HRSG's.
- Wiring hot loop checks for TCP, HRSG's, DCS and local control system.
- All tests for mark vie and DCS control system (logic, signal and function test).
- Check for all I&C equipment for BOP (WTP, ACP, etc...).
- Testing for all valves (control, motorize, pneumatic and hydraulic valves).
- Clear all the Punch list, NCR's and WDR's for all Blocks related to I&C.
- Testing of turbine supervisory instrument (BENTLY 3500).
- GT control system modification for the combined cycle.
- Hot Loop check for all instruments for PLC's, HRSG's included DCS system.
- Troubleshooting of the above systems regarding to defect report and closing the punch list for all units.

Dates : From Mar. 2010 till Oct. 2011

Employer : ARABIAN BEMCO at Saudi Arabia

Project: QASSIM Power Plant Extension 4 gas turbines GE frames 7EA with MARK

VIe control system

Job title : Lead I&C Testing & Commissioning Engineer

Job Description : Check for all I&C equipment for turbines.

• Follow the Calibration and loop check for all field instruments.

- Cold and hot loop checks for (TCP).
- All tests for mark vie (logic test, signal test).
- Check for all I&C equipment for BOP.
- Testing of turbine supervisory instrument (BENTLY 3500).
- Review all testing & commissioning procedures as per contract and drawing.

• Troubleshooting of the above systems regarding to defect report and closing the punch list for all units.

Dates : From Jun. 2002 till Mar. 2010

Employer : Upper Egypt Electricity Production Company (UEEPC)

Projects : El-Kureimat I & II

Job Description

 Sr. I&C Construction & Commissioning Engineer at El-Kureimat II - Two HRSG (CMI) with Ovation DCS (Emerson) control System and one steam turbine (HITACHI) with MARK VI system (from Dec. 2007 till Mar. 2010):

- Responsible for "I&C drawings review" according to the contract specification requirements for HRSG and steam turbines HITACHI 250MW.
- Check all control signal for HRSG with Ovation DCS control System (cold & hot loop check).
- Function check and logic test for Ovation control system.
- All tests for Mark vi (TCP) & (TSI) steam turbine.
- All tests for mark 6 (logic test, signal test).
- Calibration and loop check for all field instruments.
- Punch list for all I&C equipment.
- Sr. I&C Commissioning & Start-up Engineer at El-Kureimat II 750MW Combined Cycle Power Plant (from Mar. 2004 till Dec. 2007):
 - UPPEC Representative, responsible for commissioning of all I&C work.
 - Responsible for "I&C drawings review" according to the contract specification requirements for two gas turbines Siemens V 94.3A.
 - Punch list for the two gas turbines.
 - Calibration and loop check for all field instruments.
 - TXP control system for two gas turbines (Siemens V94.3A).
 - Siemens S5 PLC (for fail safe control system).
 - Siemens S7-300 PLC for auxiliaries.
 - SIMADYN D (turbine governor of the two gas turbines).
 - Gas chromatograph for natural gas analysis.
- Sr. I&C Maintenance Engineer at El-Kureimat I 2x627MW Thermal Power Plant (from Jun. 2002 till Mar. 2004):
 - I&C maintenance department and work in the team.
 - Support operation of the steam turbine GE Mark V.
 - Planning for maintenance schedule (Preventive and annual maintenance).
 - Maintenance of the PLCs for all auxiliaries systems.
 - Calibration for field instruments and check all control system.
 - Troubleshooting of all Boiler instruments and burner management systems.
 - Implement of boiler commissioning and operation activities for large utility steam generator which contain: Lubrication - fuel - atomizing steam - etc...), Motors, Fans (FDF, GRF and Cooling Air Fans) First fire tests, Boiler steam blow, Boiler initial starts up and loaded tests.
 - Testing for large capacity (Condensate system & condensate pumps, Feed water system (LP, HP/IP) & FWP's, Circulating water system & CW pumps, closed cooling system, Compressed Air system, Dematerialized water pumps, Hydrogen supply plant, Potable water pumps.

Dates : From Aug. 1997 till May 2002

Employer : Cairo Poultry Company **Job title** : I&C Maintenance Engineer

Job Description: • Maintenance of the units Automation control system.

Maintenance of the PLC for auxiliary systems.

Calibration for field instruments.

Troubleshooting for all field instruments and control system.

Check and support operation process.

Field of experience : • Summary:

- 3 years as a Lead I&C Maintenance Engineer at Kureimat II Power Plant in Egypt (Hitachi turbine with Mark vi control system, gas turbine Siemens TXP 3000).
- 1 year as a Lead Control & Testing & Commissioning Engineer at PP13 (1800MW) Combined Cycle Power Plant (GE turbine Mark vie) with GAMA Company at Saudi Arabia.
- 6 years as a Lead I&C Engineer at PP10, PP12 Power Plant (GE turbine Mark vie) with ARABIAN BEMCO Company at Saudi Arabia.
- 6 months as Lead E- I&C Engineer (Ovation control system) with Bechtel Company at Al KHALJJ Power Project in SIRTE LIBYA.
- 1.5 years as Control Lead (GE turbine Mark vie) at QASSIM Power Plant with ARABIAN BEMCO Company at Saudi Arabia.
- 8 years as a Senior I&C Engineer (GE turbine Mark vie, Siemens TXP and Ovation DCS) at KUREIMAT Power Plant at Egypt.
- 5 years as an I&C Maintenance Engineer for Industrial Process at Egypt.

Main Achievements:

- Ensured HSE awareness on the job to ensure full buy-in of the HSE policies by all staff which helped achieving the set HSE targets.
- Manage pre-commissioning and commissioning activities for large size projects, SCPP, CCPP, Thermal PP, etc.
- Monitor commissioning performance, train client staff as required and ensure safe work practices at site.
- Developed systemization and package completions according to client standard procedures and completion system.
- Check control logic and control interface for control panels and wiring (TCP, PLC, individual control system, DCS and network architecture system).
- Check the LV, MV switchgear and MCC such as control checks, functional, interlock test.
- Manage interfaces with construction disciplines, vendors, QC, TOP and ensure task completion on time as well as enforcing ITP and specification compliance.

Skills:

- Development of Plant Systemization and Commissioning plans, testing of large capacity Utility Gas turbine, steam generators, HRSG, Steam turbines, large high-pressure pumps and individual control system PLC DCS.
- Manage interfaces between commissioning and all other

disciplines.

 Good knowledge in design codes standards (API, ASME, NACE, ASTM, ISA, etc.).

Summary:

- In depth experience in facilities instrumentation and control construction, commissioning and maintenance is cumulated from 25 years of experience in power generation projects.
- I spent over 20 years on I&C construction and commissioning SCPP, CCPP and Thermal PP in addition to 5 years in maintenance.
- As Senior I&C Engineer I have managed construction I&C completion, commissioning and developed packages start-up and operation procedure in line with client's standards.
- I started my career as an I&C Maintenance Engineer and worked as a Control Engineer which led me to take a position of a Lead Control Engineer, I hence lead the commissioning process as a contractor commissioning engineer.