

**104736-ELE-1MOS-E-2004**  
**Process Commissioning Engineer Utilities**

Holds a B. Sc. in Electronics & Communication Engineering and has over 15 years' experience working in operation, commissioning and start-up at Power Plants.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 24/02/1981  
Gender : Male  
Marital Status : Married  
Residence : Currently Uzbekistan

## EDUCATION

: B. Sc. in Electronics & Communication Engineering, Tanta University, 2004

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

- : Successfully completed the training about PTWO in Siemens permit to work system in Cairo New Capital CCPP by Siemens Company (Aug./Sep. 2017).
- : Successfully completed the operating training about CONRO STEAM for steam turbine and (BOP) balance of plant, by ALSTOM Company Training Center in PP#12 Training Center (Dec. 2015).
- : Successfully completed the operating training about GE MS7001FA0.5 gas turbine in PP#12 Training Center, Saudi Arabia (Feb. 2015). The training course includes all data about GE gas turbine, start-up & shutdown procedure, normal & emergency operation, trouble shooting, 13.8KV switch gear, 480 v load center, generator & transformer protection and diesel generator.
- : Successfully completed the operation of GE gas turbine training session in Alquryah Training Center, Saudi Arabia (Sep. 2014).
- : Successfully completed a thermal power plant training session in Nubaria Combined Cycle Power Plant Training Center, the training includes all electric & mechanical information about all power plant types (Mar./Apr. 2008).

# CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From May 2023 till now  
**Employer** : Enter Engineering Group Co. (Uzbekistan), Surxandaryo region  
**Project** : Baysun Gas Processing Plant BGPP (Uzbekistan), Mustakilikning 25 yiligi for annual processing of 5 billion m3 of natural gas with high content of CO2 and H2S, produced at the gas field, this plant designed by Shell Company  
**Job title** : Process Commissioning Engineer Utilities  
**Job Description** : Commissioning & operation of:

- 8x1 Caterpillar type gas Engine each one gas engine 4.5MW, 10.5KV.
- Boiler System (Macchi type) fire tube using natural gas (Macchi M. A. R. S. II Burner).
- Steam turbine FRANCO TOSI STEAM TURBINE with 2x25MW back pressure steam turbine, single Flow, single casing and Rotor coupled operated by Woodward control system (505XT).
- Regeneration Gas compressor (sundyne type).
- Water treatment System includes (potable water treatment, row water treatment and Demineralization water treatment plant).
- Screw air compressors.
- Closed cooling pumps, circulating pump, sump pumps and all BOP at M25 BGPP.
- PTW, LOTO during commissioning phase.

**Dates** : From Jan. 2019 till Apr. 2023  
**Employer** : Middle Delta Electricity Production Co. (MDEPCO)  
**Project** : Nubaria Combined Cycle Power Plant, Egypt  
**Job title** : Shift Charge Engineer  
**Job Description** :

- Control and operate safely and efficiently 4x250MW Siemens gas turbines "T3000 Control System" - frame V94.3A with Air Cooled generators.
- To control and operate 2x250MW Mitsubishi steam turbines with "DCS Control System", involve by 4 x HRSG with water cooled condenser and all of combined cycle auxiliaries.
- Commissioning and operation for 2x250MW GE gas turbines "mark vie control system"- frame MS9001FA.
- Carrying on the construction work of 1x250MW - ALSTOM steam turbines by ALSTOM company, 2 x HRSG by STF company and all of combined cycle auxiliaries.
- Start-up and shutdown of the power plant units with Scada system (DCS).
- Commissioning and start-up of steam and gas turbines.
- Commissioning and start-up of heat recovery steam generator.
- Commissioning and start-up of gas turbine after overhauling.
- Check that the commissioning procedures are realized in compliance with the specified procedure and instructions
- Commissioning and operation of rotating equipment such as circulating pumps, feed water pumps, closed cooling pumps, fire pumps, air compressor, gas compressor.
- Commissioning of critical equipment such as by pass valves and tuning of valves.

- Commissioning of (lube oil lines, pumps, heat exchangers) by cleaning and flushing with water and chemical cleaning.
- Commissioning of gas turbine for fuel oil operation and NOX operation.
- Conductance of specific functional tests and evaluation/checking of the parameters necessary to be adjusted in order to achieve the acceptance criteria.
- Solve any kind of technical aspects that arise during the start-up, testing and operation of the mechanical systems and their associated equipment.
- Perform the gas turbine and steam turbine during reliability.
- Remark and update the technical documents (e.g., P&IDs, system descriptions) with all applied modifications and adjustments that eventually will take place during the commissioning period.
- Test and perform of gas turbine protection setting and feedback.
- Start-up and shutdown the machine during testing and turning gear.
- Commissioning all auxiliaries of gas turbine (lube oil, hydraulic skid, pneumatic skid, Fuel gas skid, fuel oil skid, NOX skid).
- Commissioning of steam turbine auxiliaries (lube oil skid, hydraulic skid, gland steam skid, seal oil skid, vacuum skid).
- Check the values of alarm and trip for power plant.
- Commissioning the HRSG such as (hydrostatic test of pipes).
- Chemical cleaning of HRSG pipes and lines.
- Make steam blow for HRSG component (super heater, economizers, and evaporators).
- Make steam blow for high pressure and medium, low-pressure coils).
- Connect and disconnect of power plant transformers, medium, low voltage switch gears (6.3KV, 220KV, 500KV).
- Calculate the performance of the operating units such as steam and gas turbines.
- Observe the work permits during the shift.
- Solving the trouble shooting during the shift.
- Operation of gas turbine during the shift SIEMENS V94.3A & GE frame 9FA.
- Maintenance the gas turbine during the shift to have smooth operation.
- Make annual maintenance & preventive maintenance.
- Make weekly and monthly maintenance program.
- Make maintenance of the machine during outage.
- Have four gas turbine minor inspection of gas turbine including combustion chamber, burners, fuel pipe lines.
- Chemical cleaning of burners, and inspection after cleaning by periscope, combustion chamber tiles to replace the failure tiles.
- Have four gas turbine hot gas path inspection including combustion chamber, turbine, to inspect combustion chamber tiles, combustion chamber burners, replacement the turbine blades by new one and make treatment of old one by company.
- Check and measure the clearance of blades of fixed and moving blades.
- Have two gas turbine major inspection including compressor, combustion chamber, turbine (replace compressor blade in case of failure, inspection of combustion chamber tiles, burners, turbine blades, bearing inspection, shaft inspection, pumps, valves).
- Regulate the work between technicians.

- Mange and prepare the spare parts before overhauling.
- Mange and regulate the work permits, during the shift.
- Start-up and shutdown of power plant.
- Commissioning of gas turbine after overhauling including valves, pumps, gas turbine start-up, increasing the load.
- Check and tighten the connection of fuel lines including leakage test before start.
- Commissioning the flame stability during start-up.
- Check the NOx & Sox content in exhaust to protect the environment.
- Calculate the gas turbine efficiency and heat rate of the machine.
- Observe the performance of gas turbine during the shift including fuel consumption and the load.
- Check and observe the protection of auxiliaries such as vibration, temperature, pressures, hot and cold spots of blades.
- Observe the power transformer during the shift.
- Connect and disconnect the power plant transformers switch gears.
- Commissioning of inlet cooling of compressor (wet compression).
- In SIEMENS gas turbine we make the overhauling of the machine due to operating hours:
  - Minor inspection at 8000hr.
  - Minor inspection at 16000hr.
  - Hot gas path inspection at 25000hr.
  - Minor inspection at 33000hr.
  - Minor inspection at 41000hr.
  - Major inspection at 50000hr.

<b>Dates</b>	:	From Oct. 2018 till Dec. 2018
<b>Employer</b>	:	LOTTE E&C – Indonesia Power
<b>Project</b>	:	Grati CCPP (PEAKER) Extension 450MW, Indonesia
<b>Job title</b>	:	Commissioning Team Leader
<b>Job Description</b>	:	<ul style="list-style-type: none"> <li>• To control and operate safely and efficiently 2x150MW Ansaldo gas turbines “ABB Control System” - with Air Cooled generators.</li> <li>• To control and operate 150MW Skoda steam turbines with “ZAT Control System”, for reliability test involve by 2 x GE HRSG with water cooled condenser and all of combined cycle auxiliaries (Netmation control system).</li> <li>• Monitor desalination plant that produced 40 t/h.</li> <li>• Assist the implementation of Log Out / Tag Out (LOTO) System in accordance with the company policies and procedures.</li> <li>• Impart training and supervise the work of subordinate staff.</li> <li>• To assist the training and qualification of Customer’s operations team as per guidelines of the company.</li> <li>• Take full responsibility for health, safety and environment by following all EHS requirements during work.</li> <li>• To ensure that shift in charge engineers and members of the operations team adhere to company rules and work ethics.</li> <li>• To prepare operations activities reports as per requirements of the operation manager.</li> <li>• To provide coverage for Operations Manager in case of absence.</li> </ul>

**Dates** : From Mar. 2017 till Oct. 2018  
**Employer** : SIEMENS AG  
**Project** : Cairo New Capital Combined Cycle Power Plant 4800MW  
**Job title** : Commissioning & Operation Engineer  
**Job Description** :

- To create and review commissioning procedures (cold and hot) as per SIEMENS commissioning plan & procedures for 8x406MW SGT-8000H SIEMENS Gas turbines and 4x406MW Steam turbines model SST5-5000 with T3000 DCS.
- To implement and follow-up with commissioning team HRSGs pre-commissioning and commissioning activities like Flushing, Hydro test, chemical cleaning, Steam blowing, trevi test, etc.
- To perform the start-up & operation safely and efficiently for all the plant.
- To provide technical support for client operation and maintenance team as per SIEMENS strategy.
- To ensure safe working conditions during all commissioning phases.
- To monitor progress, recording all test results, witnessing final testing and acceptance of equipment.

**Dates** : From Mar. 2014 till Mar. 2017  
**Employer** : Saudi Electricity Company (SEC)  
**Project** : PP#12 Combined Cycle Power Plant, Saudi Arabia  
**Job title** : Lead Commissioning & Operation Engineer  
**Job Description** :

- Perform with commissioning team all commissioning activities for 8x180MW GE- MS7001FA .05 gas turbines “Mark Vie Control System“ with hydrogen Cooled generators.
- To perform and follow-up with commissioning team all pre-commissioning and commissioning activities like: Hydro test, chemical cleaning, Steam blowing, safety valves test, etc. for 8 ALSTOM HRSGs and 2x340MW ALSTOM STGs as per ALSTOM Commissioning Inspection and Test Plan (ITPL).
- Assist the implementation of Log Out / Tag Out (LOTO) System in accordance with the company policies and procedures.
- Impart training and supervise the work of subordinate staff.
- To assist the training and qualification of Customer’s operations team as per guidelines of the company.
- Take full responsibility for health, safety and environment by following all EHS requirements during work.
- To ensure that shift in charge engineers and members of the operations team adhere to company rules and work ethics.
- To prepare operations activities reports as per requirements of the operation manager.
- To provide coverage for Operations Manager in case of absence.

**Dates** : From Jan. 2015 till Jun. 2015  
**Employer** : Saudi Electricity Company (SEC)  
**Project** : OSPP #8 Simple Cycle Power Plant crude oil fire, natural gas – KSA  
**Job title** : Commissioning & Operation Engineer  
**Job Description** :

- To control and operate from DCS safely and efficiently 9x50MW ABB gas turbines crude oil with distillate fuel oil backup “EGATROL Control

System", Operate 4x120MW GE gas turbine (MKVI CONTROL SYSTEM) and all BOP Systems.

- Provide support to the operations team for any kind of operation such as unit start-up / unit shut down / unit cool down / decision making during operation.
- Support the operations team with the PTW process.
- Support the operations team in recovering the unit during turbine trips.
- Support the operations procedures to the Operations Manager.
- Support the corrective maintenance when required. Act in emergency situations.
- Support the creation of the QMS regarding the work procedure and instructions for the operations tasks.
- Lead the possible plant improvements from the operations point of view.
- Act as bridge for the Engineering support coming from client or other vendors.

- Dates** : From Feb. 2008 till Mar. 2014
- Employer** : Middle Delta Electricity Production Co. (MDEPCO)
- Project** : Nubaria Combined Cycle Power Plant, Egypt
- Job title** : Shift Charge Engineer
- Job Description** :
- Control and operate safely and efficiently 4x250MW Siemens gas turbines "T3000 Control System" - frame V94.3A with Air Cooled generators.
  - To control and operate 2x250MW Mitsubishi steam turbines with "Netmation Control System", involve by 4 x HRSG ALSTOM "ALSPA 320 CONTROL System" with water cooled condenser and all of combined cycle auxiliaries.
  - Commissioning and operation for 2x250MW GE gas turbines "MKVIE control system" - frame MS9001FA.
  - Carrying on the construction work of 1x250MW - ALSTOM steam turbines by "ALSPA 320 CONTROL SYSTEM", 2 x HRSG by STF company and all of combined cycle auxiliaries.
  - Start-up and shutdown of the power plant units with Scada system (DCS).
  - Commissioning and start-up of steam and gas turbines.
  - Commissioning and start-up of heat recovery steam generator.
  - Commissioning and start-up of gas turbine after overhauling.
  - Check that the commissioning procedures are realized in compliance with the specified procedure and instructions.
  - Commissioning and operation of rotating equipment such as circulating pumps, feed water pumps, closed cooling pumps, fire pumps, air compressor, gas compressor.
  - Commissioning of critical equipment such as by pass valves and tuning of valves.
  - Commissioning of (lube oil lines, pumps, heat exchangers) by cleaning and flushing with water and chemical cleaning.
- Field of experience** :
- Commissioning / start-up / operation / maintenance for all of CCPP equipment's.
  - Excellent knowledge of Boilers, HRSGs, GTGs and STGs, Water/Steam cycle (WSC) and all related BOP.

- Excellent knowledge of the implementation of Safety rules and Log Out / Tag out (LOTO) System in accordance with the Company policies and procedures.
- Excellent knowledge of On-site support activities including trouble shooting, OJT and all field follow up activities.
- Proficient with operation / commissioning technical daily reports, O&M Manuals, Design Engineering Documents, i.e., P&ID, technical specs, data sheet, Layouts, etc.
- Proficient in team leading and coordinating & familiar with splitting tasks on team's members.

Skills:

- Experience in a leadership role within a power generation field.
- Ability to read and interpret documents such as P&ID's, schematic diagrams, safety rules, commissioning Books, operating and maintenance instructions and procedure manuals.
- Ability to write routine reports and correspondence.