

101028-ELE-1MOS-E-2006
I&C Maintenance & Commissioning Engineer

Holds a B. Sc. in Industrial Electronics & Automatic Control Engineering and has over 14 years hands-on experience working in operation, maintenance, commissioning, start-up and I&C at Nubaria Combined Cycle Power Station.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 16/07/1983
Gender : Male
Marital Status : Married
Residence : Damanhour

EDUCATION

: B. Sc. in Industrial Electronics & Automatic Control Engineering, Menoufia University, 2006

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Off-shore training of gas turbine (250MW Siemens V94-3A) in (SPPA-T3000) Engineering & Maintenance & Service & Administration and Commissioning by Siemens Company, Siemens Power Academy, Karlsruhe – Germany.
- : On-shore training of steam turbine operation by Mitsubishi Heavy Industries Company, Nubaria.
- : On-shore training of steam turbine ALSTOM Operation Company, Nubaria.
- : On-shore training of ALSTOM HRSG, Nubaria.
- : Trainings at Middle Delta Electrical Production Company:
 - Components and operation of gas turbine (Apr. 2008).
 - Components and operation of combined cycle (Apr. 2008).
 - Components and operation power plant auxiliaries (May 2008).
- : Basic (operation) training Siemens CTG 250MW type V94.3A, Components and operation of gas turbine (V94.3A), Nubaria – Egypt (from Jan. till Apr. 2008).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Mar. 2020 till now
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria Combined Cycle Power Station I, II & III – 3x750MW:
- Four SIEMENS gas turbines 4x250MW.
 - Four ALSTOM heat recovery steam boiler (HRSG).
 - Two MITSUBISHI steam turbines 2x250MW.
 - Two GE gas turbines 2x250MW.
 - Two STF heat recovery steam boiler (HRSG).
 - One ALSTOM steam turbine 1x250MW.
- Job title** : I&C Maintenance & Commissioning Engineer
- Job Description** : I&C Engineer in Siemens Gas Turbine V94.3A with good experience in Siemens Gas Turbine V94.3A in the following systems:
- Fuel gas commissioning and start-up.
 - Fuel oil commissioning and start-up.
 - Maintenance and fault recovery for Automation control system (SPPA - T3000) software and its hardware components such as (power supply cards, CPU, interface modules and input/output cards).
 - Maintenance and fault recovery for Fail safe control system and its hardware components such as (power supply cards, CPU, interface modules and input/output cards).
 - Maintenance and fault recovery for GOVERNER system software and its hardware components such as (power supply cards, CPU, interface modules and input/output cards).
 - Major and minor inspection for the gas turbine.
 - Hot gas path inspection.
 - Gas turbine tuning and optimization.
 - Troubleshooting of the control system problems.
 - Calibration of the field devices transmitters, switches, gages,etc.
 - Calibration of all field instruments and testing, installation of all turbine supervisory instruments (TSI) (Vibration probes and proximity transducers, Speed sensors, ...).
 - Fault analysis using the OM 650 display facilities.
 - Tools for system analysis, administration, event managing of OM 650.
 - Analysis hardware and software errors.
 - Dealing with the input/output cards, installation, Programming and faults recovery.
 - PLC programming and troubleshooting.
 - Temperature sensors RTD and Thermocouple faults recovery.
 - Gas detection system, fire alarm system and fire-fighting system.
- Dates** : From Oct. 2011 till Mar. 2020
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria Combined Cycle (2x750MW) Power Station:
- Two modules, each module consists of:
 - Two Siemens CTG 250MW type V94.3A.
 - Two horizontal Alstom HRSGs.
 - One Mitsubishi STG 250MW (HP, IP, LP).

- 220KV switchyard ABB.
 - 500KV switchyard JAPAN AG.
 - Four tie transformers 500/220KV ZTR.
 - Medium and Low Voltage Switchgears.
- Job title** : Senior Shift Charge Engineer
- Job Description** :
- Lead the engineers and technical groups to operate 4 Combustion Turbine Generator (Siemens), with 2 combined Steam Turbine Generator (Mitsubishi) and all related equipments.
 - Contact with the dispatch to manage the total power needed.
 - Manage the power station in disturbed situations.
 - Record and write all necessary data and information.
 - Shut down and start-up the two modules (4 gas turbines (4x250MW) with two combined boilers generates steam for two steam turbines (2x250MW).
 - Checking up the Equipment Electrically and mechanically before checking up the Equipment operation.
 - Follow up the Work orders for the site in accordance with the specifications and standards required for the plant.
 - Lock out tag out for Electrical & Mechanical Equipment's before & after Work orders.
 - Create the work orders with the proper isolation and precaution required.
 - Securing the field and safety of the Equipment's after shutdown.
 - Checking up and absorbing the Equipment's and making sure that all Auxiliaries in the normal operation.
 - Supervising the Equipment's after operating, change over or maintenance.
 - Reporting about my disorder and any unusual sound or smell (like fire).
 - Making report about disorder before shutdown of maintenance.
 - Charging of the shift during operation and shutdown.
 - Tie between operator in main control room and technician in the field.
- Dates** : From May 2015 till Oct. 2015
- Employer** : Elsewedy and PSP Company
- Project** : Attaqa New Project (4x165MW) Power Station:
- (4x165MW) Siemens gas turbine SPPA-T3000 control system.
 - Medium and Low Voltage Switch gears.
- Job title** : Operation & Commissioning Engineer
- Job Description** :
- Start-up and operation for 4 combustion turbine generator (4x165MW) Siemens.
 - Perform the gas turbine during reliability.
 - 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).
 - Check the values of alarm and trip for power plant.
 - Connect and disconnect of power plant transformers, medium, low voltage switch gears (6.3KV, 220KV).
 - Observe the work permits during the shift.
 - Solving the trouble shooting during the shift.
 - Operation of gas turbine during the shift SIEMENS.
 - Chemical cleaning of burners, and inspection after cleaning by

periscope, combustion chamber tiles to replace the failure tiles.

- Regulate the work between technicians.
- Manage and regulate the work permits, during the shift.
- Start-up and shutdown of power plant.
- Commissioning of gas turbine including valves, pumps, gas turbine start-up, increasing the load.
- Check and tighten the connection of fuel lines including leakage test before start.
- 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.

Dates	:	From Jan. 2008 till Oct. 2011
Employer	:	Middle Delta Electricity Production Company (MDEPC)
Project	:	Nubaria Combined Cycle (2x750MW) Power Station
Job title	:	Operation Engineer in D.C.S. Control Room
Job Description	:	<ul style="list-style-type: none">• Start-up and operation for 4 combustion turbine generators (250MW Siemens V94-3A).• Start-up and operation for 2 steam turbine generators (Mitsubishi STG 250MW (HP, IP, LP)).• Operation of rotating equipment such as circulating pumps, feed water pumps, closed cooling pumps, fire pumps, all plant pumps.• Perform the gas turbine and steam turbine during reliability.• 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).• Commissioning of steam turbine auxiliaries (lube oil skid, hydraulic skid, gland steam skid, seal oil, vacuum skid).• Check the values of alarm and trip for power plant.• Connect and disconnect of power plant transformers, medium, low voltage switch gears (6.3KV, 220KV, 500KV).• 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.• Have four gas turbine minor inspections 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 inspections 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.• Have two gas turbine major inspections 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.• Manage 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.
- 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.

Employer : Middle Delta Electricity Production Company (MDEPC)

Project : Nubaria Combined Cycle (2x750MW) Power Station

Job title : Training Engineer

Job Description : Give training courses to engineers and technicians about the components of power plant and how to construct and operate the combined cycles (gas turbine – HRSG – steam turbine) and how to test the electrical equipment.

Dates : From Apr. 2007 till Nov. 2007

Employer : Industrial Foods Nile Company

Job Description : Work as Electrical Maintenance Engineer in Tetra Pak department.