

103401-ELE-15MOS-E-2009
Lead Operation Engineer / I&C Engineer

Holds a B. Sc. in Electrical Engineering (Communication & Electronics Dept.) and has about 8 years hands-on experience working in operation, commissioning, start-up, maintenance and I&C.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 03/06/1987
Gender : Male
Marital Status : Married
Residence : El-Behira

EDUCATION

: B. Sc. in Electrical Engineering (Communication & Electronics Dept.),
Alexandria University, 2009

LANGUAGES

Arabic : Native Language
English : Very Good
French : Fair

COMPUTER SKILLS

: Windows, MS Office, Internet
: Matlab
: AutoCAD

TRAINING COURSES AND CERTIFICATIONS

: GE OpFlex Operation Training by GE Learning Center Instructor.
: GE EHS complying.
: Egyptian Electricity Holding Company, Operation Training.
: Middle Delta Electricity Production Company, Operation Training.
: English conversation.
: GSM and UMTS.
: Soft skills.
: Matlab
: Training at Middle Delta Electricity Production Company (Gas turbines, Steam Turbines, HRSG, Switchgear, Switchyard, MCC, Trashracketc.).

- : Training at Middle Delta Electricity Production Company, Banha Power Station (Gas turbines MS9001FA, MarkVIe (Operation Curves, Common Malfunctions, fire extinguishing System and Combustion System in Gas Turbines).
- : Training at General Electric Company / Upper Egypt Electricity Production Company, Gerga Power Station (Egypt's emergency plan with turbines TM2500+, Woodward).
- : Training at Summed Arab Petroleum Pipelines Company (DCS system, valves, pumps, instrumentations and auxiliaries).
- : Training at Alexandria Electricity Distribution Company.
- : Self-study: Studied all control details of Mark VI for 4+ years, including gas turbine protections (trip, shutdown and run back), Fuel Stroke References (minimum, start-up, acceleration, speed/load, temp and shutdown), Gas turbine Control Valves (SRV, D5, PM1 and PM4), Trip oil Solenoids (IGV, gas and liquid), auxiliary fans and motors (lube oil pumps, seal oil pump, exhaust frame, bearing #2, turbine compartment, ...etc.) DLN2.0+ modes (diffusion, premix, sub pilot premix, pilot premix and load rejection), gas purge valves, purge timers (simple and combined cycle), ...etc.
- : Self-study: Studied GE gas turbines operation and maintenance manual including Air Inlet & Exhaust, Lube/Hydraulic Oil, Cooling Sealing Air System, Cooling Water, Gas Fuel System, Liquid Fuel System, Atomizing Air System, Water Injection, Purge System, Fire Detection & Protection, Hazardous Gas, Water Wash...etc.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Mar. 2017 till now
Employer : Middle Delta Electricity Production Co.
Project : Nubaria III Power Station
Job title : Lead Operation Engineer
Job Description : Lead and teach a team of Engineers and Technicians in CCGT for unit safe operation, O&M and Control during the Operation, Maintenance, Installation and Commissioning of the GE gas turbines.

Dates : From Mar. 2012 till Mar. 2017
Employer : Middle Delta Electricity Production Co.
Project : Nubaria III Power Station
Job title : Operation Engineer for General Electric MS9001FA gas turbine, Alstom steam turbine and STF HRSG companies

Dates : From Jun. 2015 till Aug. 2015
Employer : [EGYPTROL](http://www.egyptrol.com) – subcontractor for General Electric Co.
Project : Gerga Power Station
Job title : Operation / I&C Engineer for TM2500+ gas turbine

Dates : From Jun. 2011 till Mar. 2012
Employer : Mobiserve Holding Co.
Job title : I&C Engineer for Mobinil, Motorola, NEC and Alcatel companies

Dates : From Apr. 2011 till Jun. 2011
Employer : Cellnet International Co.
Job title : Lead MW Dish Design Engineer

Dates : From Dec. 2009 till Apr. 2011
Job Description : Worked at Cellnet International Co. (a subcontractor for Etisalat Misr Company) in the field of GSM, UMTS and Radio transmission as MW Dish Design Engineer.

Technical Skills:

Software & Hardware:

- Mark VI / Mark VIe.
- Cimplicity.
- PI historian.
- GPS.
- GAP 3.09.
- TM2500+.
- Control assistants.
- Pathloss 4.
- Procomm.
- GEA Westfalia Separator.
- Google Earth.
- Gas detectors.
- Laser Range Finder.
- Binoculars.

GE Skills:

- GE Gas Turbine MS9001FA DLN2.0+/2.6+, O&M experience.
- GE Gas Turbine TM2500+ Operation experience.
- Mark VI/e: Function Blocks, Valve Calibration, Signal Force, Modify Live value, PLC ladder logic, Build and Download to TMR, DDR, Cimplicity, Trender, Trip Log and PI Historian.

Field of experience : • Experience Power Station (Operation & Control in CAPP):

- Participate in units commissioning and start-up during the upgrade of MS9001FA gas turbines from DLN 2.0+, 8K to DLN2.6+XD5 DF, Advanced Gas Path (AGP), Combustion Dynamic Monitoring (CDM), EFM, CTM, Opflex, 32K, Auto Tune DX, first done in Middle East.
- The units upgrade include migration from Mark VI to Mark VIe, toolbox to toolboxST.
- Participate in 2 major inspections and 4 minor inspections for MS9001FA gas turbines.
- Operate and monitor the plant system both from the Control Room and locally as required, maintaining the unit within all applicable guidelines and regulations including emissions, efficiency, heat rate and safety.
- Maintain a complete set of logs to include all information during normal operation and operational excursions.
- Advanced computer skills with GE toolbox\ST, Mark VI and GE

- Cimplicity software.
- Familiar with Turbine Commissioning and start-up in addition to turbine tuning.
- Familiar with Turbine Operation and Maintenance for MS9001FA and TM2500+ gas turbines.
- Understand PLC ladder logic, including basic understanding of how to navigate through ladder rungs while troubleshooting.
- Familiar with Mark VI hardware controllers, PDM, signal wiring and I/O cards.
- Fully aware of many instruments ex: pressure, temperature, level, flow transmitters, indicators with ability to fix, repair, change and calibrate them.
- Familiar with turbine protection control and generator protection.
- Familiar with turbine Performance Test for MS9001FA and TM2500+ gas turbines.
- Doing signal tracing, change live values, force signals and troubleshooting.
- Responsible for monitoring the status of all running plant systems on a continuous basis.
- Respond to alarms by taking fast appropriate corrective actions and executes plant shutdown and start-up procedures as required.
- Assure that the plant meets its generating requirements while operating in a safe and efficient manner.
- Familiar with many valves types.
- Transferring from\to gas to\from distillate.
- Doing offline water wash when needed.
- Calibrating valves ex: IBH, SRV, and GCV's.
- Finding trends historian using PI software.
- Extensive knowledge of gas turbine operating philosophies, including the turbine, generators, auxiliary systems, test equipment and their associated test procedures.
- Connect/disconnect of power plant transformers, medium, low voltage switchgears.
- Doing live water wash for switch yard bus bars.
- Receive and respond to national dispatcher orders and requests.
- Familiar with GEA Westfalia Separator.
- Familiar with HRSG and steam turbine operation.
- Train undergraduate engineers every year at Nubaria Power Station.
- Maintain a complete set of logs to include all information during normal operation and operational excursions.
- Module description:
 - Two GE gas turbines 250MW frame MS9001FA.
 - Two horizontal boilers STF HRSG.
 - One ALSTOM steam turbine 250MW HP, IP and LP stages.
 - Auxiliaries (service, closed cooling, circulating Systemsetc.).
 - 500KV switchyard AREVA.
 - Medium and Low Voltage Switchgears Schneider Electric.
 - Pacis, Switchyard, Trash rack.
 - Another power plant site: two TM2500+ 25MW gas turbine and their auxiliary systems.
- Experience I&C (Mobiserve):

- Following up calibration, cold loop check, hot loop check, commissioning, start-up.
- Make Preventive Maintenance, Corrective Maintenance and Under Call duty for MobiNil sites for both Environment and Radio Equipments for GSM and UMTS system.
- GSM general performance auditing and maintaining (BTS calibration as Tx power adjustment and Rx frequency correction).
- Dealing with NEC microwaves NEO and V4 (routing 2G and 3G).
- Dealing with both Motorola BTS (Horizon / Horizon II) macro.
- Measuring VSWR and troubleshooting the fault.
- Experience MW Dish Design Engineer (Cellnet):
Design height and direction of microwave antenna for Etisalat Misr Co.
 - Prepare for field work of all links using Google earth program.
 - Determine the coordinates of the obstacles and the azimuth of all sites.
 - Survey and detect obstacles using Binocular, GPS and Laser Range Finder.
 - Decide the case of links pass or fail using pathloss4 program.
 - Design the Min. antenna height for all sites according to distance and freq.
 - Make total line of sight report for LOS matrix.
 - Experience in BTS installation, Commissioning, Expansion, MW dish and antennas.
- Experience (Survey SF2):
Survey for new sites and check the new sites according to NTRA standard:
 - Draw cad for the new sites even if green field or roof top.
 - Take new mark with GPS.
 - Take panorama pictures, access road, entrance and all descriptions.
 - Determine the appropriate place for new tower and Shelter.
 - Check NTRA protocols for these new sites.

Presentations:

Make a presentation for BANHA Power Station, explaining how to "CONTROL GAS TURBINE POWER OUTPUT IN CONJUNCTION WITH GRID FREQUENCY" and Proposal for GE Company to solve the problem of varying power out VS freq in Mark VIe.