101034-MEC-1MOSY-E-2005

Lead Operation Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 17 years experience working in operation, maintenance, commissioning and start-up at several Power Plants. Has experience in GE gas turbines frame MS9001FA (250MW), GE gas turbine frame 9E (125MW), Siemens gas turbine frame V94.3A (250MW), ALSTOM steam turbine, ANSALDO steam turbines, STF HRSG, AC BOILER for HRSG and all BOP systems in combined cycle power plant, also in operation of high, medium and low voltage switchgears & load centers.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 06/10/1981

Gender : Male
Marital Status : Married
Residence : El-Behira

EDUCATION

B. Sc. in Mechanical Power Engineering, Menoufia University, 2005

LANGUAGES

Arabic : Native Language

English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

Q Basic programming

TRAINING COURSES AND CERTIFICATIONS

- : On-shore basic operation training of GE gas turbine (Frame 9FA), Nubaria (from Feb. till Apr. 2009).
- : Basic operation training of GE gas turbine (Frame 9FA), GE Energy Products Europe, Belfort FRANCE (Jan. 2009):
 - Operation of gas turbine.
 - Visited Manufactories.
 - Auxiliary Equipment control.
 - Turbine control system.
 - Auxiliary Equipment control.
- : Training course in Nubaria Power Station (1 week), under the direction of operation engineers for GE gas turbine.
- : On-shore in Nubaria Power Station (1 week), under the maintenance engineers for SIEMENS gas turbine.

- Operation and maintenance of combined cycle, West Delta Electrical Production Company, Abu Qir (2 weeks in Dec. 2006).
- EHS Trainer in WDEPC Training Center (2 weeks).
- Another training courses at Nubaria Power Station Site in:
 - Service & Instrument Air Compressors.
 - Service, raw and closed cooling pumps.
 - Fire fighting system.

EHS online course by GE (Risk Assessment, Confined Space, EHS Field Service, Fall Protection, Compressed Gas, Welding Cutting, Lockout/Tagout, Respirators, Scaffold Awareness, Lead Awareness, Driving, Extinguishers, Radiation, ...etc.).

CHRONOLOGICAL EXPERIENCE RECORD

From 2021 till now **Dates**

Employer GE

Project Waad Al-Shamal 1450MW, KSA

Job title Lead Operation Engineer

Prepare all arrangements for start-up. Job Description :

> Oversee and direct the plant operators to ensure plant is running at optimal level in a safe and efficient manner.

Maintain Log book.

Supervised all LOTO activities.

Responsible for reporting all incidents, accidents and nears misses to EHS dept. for necessary actions.

Operate Solar Plant and HTF circuit and inject Solar Steam to HRSGs.

Manage and Operate HRSGs Duct Burners.

Dates From Nov. 2020 till Feb. 2021

PESCO / GE **Employer**

Project Aden Power Plant phase I 2x132MW

Job title Lead Commissioning Engineer

Job Description Manage all commissioning work scopes, to achieve schedule

milestones, Commissioning issues GE F9E.O3 GTs.

Review construction completion and ensure readiness for commissioning for 2x132 Gas turbine GE 9E.

Ensure safe work practices.

Monitor commissioning task hazards communicating non-conformances to the execution crew.

Review design deliverables and drawings to ensure completion compliance to project design and company standards.

Monitor initial start-up equipment performance and train client maintenance staff.

From Oct. 2019 till Nov. 2020 **Dates**

PGESCO Employer

Project Cairo West Supercritical Power Station (1x650MW) Job title Lead Commissioning & Shift Charge Operation Engineer Job Description : • Start / Stop for all whole plant.

- Coordination between all contractors (Process Engineer) to obtain operate the plant at safe mode, economic and stability.
- Troubleshooting /Analysis for events and alarms to avoid any abnormal case. Open work permit to fix any problems (hot, confined space and operation work permit).
- Lock out, tag out for all equipment if required.

Dates : From Nov. 2018 till May 2019

Employer : GE

Project : Sabiya CCGT-1 – Kuwait

Job title : TOP Manager

Job Description : • Review System Binders.

- Make System Walk Down with Erection & commissioning team.
- Record Punch items.
- Release NOCC after Punch items have category (A) was clear.
- Follow up the TOP matrix and updated according to the project millstone.
- Follow up on the construction team to finalize their work according to the plan to avoid any delay time.
- Follow up the Erection and commissioning ITPL (inspection and test plan)
- Follow up the Construction team to closing the remaining punch items.

Dates : From Feb. 2018 till Oct. 2018

Employer : <u>EGYPTROL</u>, GE Energy Subcontractor

Project: New West Damietta Power Plant ADD 250MW:

One module consists of:

- Four GE gas turbines 125MW model MS9001E (DLN2.6) Mark VIe.
- Four DOOSAN horizontal type HRSGs.
- One GE steam turbine (D202) 250MW (HP and LP).
- ACC (Air Cold Condenser).

Job title : TOP Mechanical Engineer & Operation Engineer

Job Description : • Review System Binders.

- Make System Walk Down with commissioning team.
- Record Punch items.
- Release NOCC after Punch items have category (A & B) was clear.
- Prepare the vendor Documents.
- Operate the whole plant at safe economic and stability.
- Troubleshooting / Analysis for events and alarms to avoid any abnormal case.

Dates : From Mar. 2017 till Feb. 2018

Employer : PGESCO

Project: AL SHABAB POWER STATION - PHASE #2:

Consists of two modules, each module consists of:

• Four GE gas turbines 125MW model MS9001E - (DLN2.6), air cooled

generators.
Four AC boiler horizontal type HRSGs.

One Ansaldo Energia steam turbine 250MW (HP and LP).

Job title : Commissioning & Start-up Engineer

Job Description: • Flushing for all system (lube oil, CCW, firefighting ...etc.).

- Rotation check & solo run test & alignment and load test for pumps.
- Review the TOP.
- Chemical cleaning for water circuit (ECO, HP, LP, EVA, AD and AE), so chemical cleaning procedure consist of fifth major steps (leak test, flushing must be achieve the flow velocity and turbidity for this phase, degreasing at suitable temp, acid or alkaline phase depend on material, washing phase and passivation by dry air or N2 depend on duration).
- Steam blow process.
- First start of turbine and make all start-up tests (first rolling, over speed test, dummy synch, manual synch, auto synch, and load rejectionetc.).
- Coordination between all contractors to obtain operate the plant at safe mode, economic and stability.
- Troubleshooting / Analysis for events and alarms to avoid any abnormal case.
- Open work permit to fix any problems (hot, confined space and operation work permit).
- Lock out, tag out for all equipment if required.

Dates : From Feb. 2017 till Mar. 2017

Employer : TÜV NORD (Germany)

Project : ATAKA Thermal Power Plant units 3 and 4 - 310MW capacity for each

Job Description: • Proof of performance test and emission of ATAKA Power Plant as a Third Party between MHPSE and EDEPCO.

- Supervision of performance test witch comparison between the equipment behavior (efficiency, emission and heat rate) and guarantee values, this mean the performance test of steam turbine shall be run and stabilized at base load. The tested load will be corrected to the guarantee conditions and then compared to the guaranteed value.
- Preparation for performance test:
 - The test will be conducted by the contractor with cooperation of the owner.
 - Prior to starting the test the contactor will check and verify the equipment and order to ensure that will perform correctly during the test.
 - Checking of the isolation of the system will be made before the performance test.
 - The fuel used for the performance test shall be analyzed during test.
 - There will be one or two hour stabilization period before the test.
- During test I am responsible for:
 - Calibration all equipment's and a data acquisition system of MHPSE was used as well as operational devices.
 - Install all measurement points.
 - Record all readings from DCS, LOCAL and DATA LOGGER device.
 - Fuel sample analysis in official laboratory.
 - Test calculation for efficiency (by direct or indirect methods) and

emissions according to Egyptian laws.

Dates : From Mar. 2013 till Dec. 2014

Employer : PGESCO

Project: Giza North Combined Cycle Power Plant (2250MW):

Consists of three modules, each module consists of:

• Two GE gas turbines 250MW model MS9001FA - (DLN2.6), H2 cooled

generators.

• Two STF horizontal type HRSGs.

One Ansaldo Energia steam turbine 250MW (HP, IP and LP).

Job title : Start-up & Operation Engineer

Job Description : • Coordination between all contractors to obtain operate the plant at safe

mode, economic and stability.

Troubleshooting /Analysis for events and alarms to avoid any abnormal

case

• Open work permit to fix any problems (hot, confined space and operation

work permit).

• Lock out, tag out for all equipment if required.

Dates : From Oct. 2012 till Feb. 2013

Employer : KHARAFI National

Project : DAMIETTA Simple Cycle Power Plant 500MW (4x125MW)

Job title : Operation Engineer

Job Description : • Conducting all preparation steps of units in field to realize permissive for

start-up from control room such as (filling line of water free of bubbles, all safety valves ready, coolers in service, all skids of hydraulic and pneumatic ready, firefighting ready, all electrical power source ready position of motorized valves in auto mode and ready to work locally, all manuals valves before and after control and motorized valves shall be

open, etc.

• Remarking alarms of units from control room and solve operation

problems.

Survey in field for more check and confirmation of safe operation of

equipment.

Dates : From Oct. 2011 till Aug. 2012

Employer: KHARAFI National

Project : EL-SHABAB Simple Cycle Power Plant 500MW (8x125MW)

Job title : Operation Engineer

Job Description : • Conducting all preparation steps of units in field to realize permissive for

start-up from control room such as (filling line of water free of bubbles, all safety valves ready, coolers in service, all skids of hydraulic and pneumatic ready, firefighting ready, all electrical power source ready position of motorized valves in auto mode and ready to work locally, all manuals valves before and after control and motorized valves shall be

open, etc.

• Remarking alarms of units from control room and solve operation

problems.

Survey in field for more check and confirmation of safe operation of

equipment.

Dates : Feb. 2008
Job title : Trainer

Job Description : I give a training Course on operation of Gas Turbine for Employees of the

EDEPCO-EGYPT (duration: 15 days).

Dates : From Jun. 2008 till Oct. 2011

Employer : Middle Delta Electricity Production Company (MDEPCO)
 Project : Nubaria Combined Cycle Module III (750MW) Power Station:

One module consists of:

Two General Electric CTG 250MW type MS9001FA.
Two horizontal STF HRSG (125 bar, 565 °C, 325 t/hr).
One Alstom STG 250MW (HP, IP, LP) steam line (650 t/hr).

• 500KV switchyard.

Medium and Low Voltage Switchgears.

Job title : Maintenance Engineer

Job Description: • Troubleshooting and Regular Maintenance.

• Open /Close work Permit under safety roles.

Coordinate with team work.Supervisor for CI & HGP.

Dates : From Sep. 2005 till Jun. 2008

Employer : Middle Delta Electricity Production Company (MDEPCO)

Project : Nubaria Combined Cycle Module I & II (2x750MW) Power Station:

Each Module consists of:

Two SIEMENS combustion gas turbines 250MW type V94.3A.
Two ALSTOM horizontal type heat recovery steam HRSG.

One Mitsubishi Steam Turbine (2x250MW).

Job title : Operation Shift Charge Engineer

Job Description: • Prepare all arrangements for start-up.

• Oversee and direct the plant operators to ensure plant is running at optimal level in a safe and efficient manner.

Maintain Log book.

Supervised all LOTO activities.

 Responsible for reporting all incidents, accidents and nears misses to EHS dept. for necessary actions.

Field of experience:

 More than 17 years experience in Power Plant Commissioning, and Operations & Maintenance in Egypt and out of Country (Kuwait, Yemen, KSA).

• Experience on GE 9FA, 9E, 9E.O3 and 7F.O5 & SIEMENS V94.3A Gas Turbines.

Experience on HRSGs HTF, ALSTOM, DOOSAN and GE.

 Experience on Steam Turbine Mitsubishi, ALSTOM, ANSALDO and GE D202 & D601.

 Experience on Conventional Power Plant MHPSE and ANSALDO Supercritical.

- Experience on Water Treatment Plant & RO Plants.
- Documentation such as RFI, Daily Progress Reports, W.D.R. and Punch Points Closing, ITPL.
- Commissioning Manager skills:
 - Manage the commissioning for large scale projects with pipe lines, Petrochemicals, Oil & Gas, Power Plant, Gas Treatment Plant (GTP).
 - Ensure quality of work with timely completion.
 - Manage interfaces with construction disciplines, vendors, QC and client to ensure task completion on time in line with the Managed the planning and resourcing required to execute completion and conducted daily follow-up meetings with all parties.