

103449-MEC-1MOS-E-2008

Operation & Performance Engineer

Holds a B. Sc. in Mechatronics Engineering and a Diploma in Mechanical Engineering. Has more than 14 years hands-on experience, including 12 years working as a Power Stations Engineer and 2 years in other fields.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 13/11/1986
Gender : Male
Residence : Alexandria

EDUCATION

- : B. Sc. in Mechatronics Engineering, Alexandria Higher Institute of Engineering and Technology, 2008
- : Post Graduate Diploma in Mechanical Engineering, Arab Academy for Science, Technology and Maritime Transport, 2019

LANGUAGES

Arabic : Native Language
English : Excellent

COMPUTER SKILLS

- : Windows, MS Office, Internet
- : Autodesk Inventor 2008
- : AutoCAD
- : Adobe Photoshop
- : Matlab and Mathcad
- : Python

TRAINING COURSES AND CERTIFICATIONS

- : Data Analysis Professional – Nanodegree, Egypt FWD initiative, Powered by: Ministry of Communications and Information Technology, Offered by: Udacity (2022).
- : Data Analysis Challenger, Egypt FWD initiative, Powered by: IT industry Development Agency (itida) and Ministry of Communications and Information Technology, Managed by: Udacity (2021).
- : Pan Arab Certified Energy Management Program (PA-CEMP), Regional Centre for Renewable Energy and Energy Efficiency (RCREEE), Egypt (2020).

- : EnerTran1x: Energy Market of Today, DelftX, an online learning initiative of Delft University of Technology (2020).
- : Cementing Training (participated in a cementing job in Khalda Oil Fields), Halliburton, Marsa Matrouh, Egypt (Aug. 2006).
- : Electronics Maintenance Training, Craft, Alexandria, Egypt.
- : Instrumentation Training, WEPCO, Abu Qir, Alexandria, Egypt (Jul./Aug. 2007).
- : Electric Maintenance Training, Vestia Ready Made Garments Company, Alexandria, Egypt (Jul. 2006).
- : Electric Maintenance Training, Telecom Egypt, Alexandria, Egypt (summer 2005).
- : Programmable Logic Control (PLC), certified from A.D.Panasonic - Jelecom, Egypt (Jan./Feb. 2008).
- : Peugeot HDi System (High Pressure Diesel Injection Systems used in Peugeot), certified from Peugeot Middle East Training Center.
- : Autodesk Inventor 2008, certified from New Horizon Computer Learning Center (Mar. 2008).
- : International Computer Driving License (ICDL), certified from Ministry of Communication and Information Technology (Sep. 2007).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Feb. 2019 till now
- Employer** : Egyptian Electricity Holding Company (EEHC)
- Project** : Burullus Combined Cycle Power Plant 4800MW
- Job Description** :
- Operation & Performance Engineer:
 - Follow up and analyze, on a daily basis, with the operation department the energy production and consumption, fuel consumption, units' status and its availability.
 - Generate a daily report with the plant status, units' production and consumption, plant fuel rate of consumption.
 - Prepare and manage daily, half-monthly, monthly and annual reports such as Fuel Consumption reports, monthly Power Production, units' availability, units' performance, etc. to be submitted to the executive management in EEHC.
 - Collect and Analyze Energy and Fuel data, and produce valuable information about the plant's production, consumption, best and worst operation regime, etc. (Extensive use of Excel and Python).
 - Record and document all the major operation activities and reports.
 - Prepare follow up and incident reports with coordination with the operation and maintenance teams of Siemens Energy O&M regarding any major incident affecting plant production, personnel or equipment safety and reporting the findings to the executives.
 - Revise all the operation's reports from the O&M team.
 - Participate in schedule the operation / outage planning in cooperation with the O&M operation team, and align with the production forecast of the Load Dispatch Center (LDC) of the National Grid.
 - Annual performance tests for all modules in the plant and ensure compatibility with the procedures, revise and evaluate the readings and the trends and ensure the results' compatibility with the contract then report back to the executives.

- Follow up with all three Mega Project power plants (Burullus, Beni Suif, and New Capital) regarding the Frequency Correction and modules' load response to grid frequency oscillation.
- Maintain good and cooperative spirit with the O&M various teams.
- Project Follow-up Mechanical Engineer (Owner Representative) - As part of the Client's Project Engineering Team:
 - Liaise with the EPC consortium (Siemens Energy – Orascom Construction) and EEHC executive management in this phase of the project.
 - Punch items closure, witness remaining systems commissioning, and ongoing EPC-related repairs.
 - Supervise, support, and guide the process of commissioning, startup, and operation of the Hydrogen Production Plant.
 - Prepare progress meetings with the contractors and report to the EEHC management.
 - Coordinate between the contractors and the O&M management, manage the handover of equipment, systems and the spare parts from the contractors, and to the O&M and resolve any arising conflict between the EPC contractors and the O&M contractor.
 - Warranty claims opening, following up and closing are part of our team's responsibility.
 - Responsible for Material Receiving MRRs and Coordinating with EEHC administration/financial representative.
 - Support and assist the head of the supervision team in Burullus Mega Project.
 - Support and assist the EEHC supervision high-level committee in all aspects of the three Mega projects (Burullus, Beni Suf and New Capital 4800MW CCPP).
 - Reporting the project's overall progress to the EEHC Management.

Dates : From Sep. 2013 till Feb. 2019

Employer : West Delta Electricity Production Company (WDEPC)

Project : Sidi Krir Combined Cycle Power Plant 750MW, Alexandria

Job title : Senior Field / Operation Engineer

Job Description :

- Supervise the overall operation of the plant during the shift.
- Revise all recorded parameters of the major units and equipment.
- Support operators in start-ups, shutdowns, isolation of equipment, and the boxing up and conservation of HRSGs.
- As a Field Engineer, closely monitor and check every equipment in the field to ensure smooth operation, report for any unusual behavior for work order issuing.
- Supervise maintenance work on the equipment to ensure the necessary corrective / preventive action has been taken efficiently plus compliance with the operation and maintenance manuals and the safety rules of the HSE.
- As an upgrade for the plant, a new Hydrogen Production Facility was to be erected; oversee the construction, commissioning of the Hydrogen Production Plant and startup the plant. Train and support the operators in the facility.
- Train and lead newly employed engineers and technicians. Ensuring that all the team is capable of handling all the different situations and operations from the basic concept of operation, daily check-ups and

normal start-up / shut down operations to the unusual Trips and load runbacks.

- Initiate discussion groups with operators to study new issues or hypothetical problems to proactively be ready for possible new challenges.

Dates : From Sep. 2010 till Sep. 2013
Employer : West Delta Electricity Production Company (WDEPC)
Project : Sidi Krir Combined Cycle Power Plant 750MW, Alexandria
Job title : Power Plant Operator
Job Description :

- Part of the engineering team, responsible for monitoring and operating the power station, recording all readings and events, and reporting any abnormalities to the senior operation engineer. Working in a rotating shift. Equipment operated:
 - Two MHI M701F Gas Turbines each coupled with Hydrogen cooled Generator.
 - Auxiliary equipment as a support consists of a number Air Filters, purge/pulse air compressors, Oil coolers, lubrication and control oil pumps and oil vapor extraction fans.
- Perform daily check-ups, routine change over, start-up and shut-down operations (both from the field and the control room) of the Balance of Plant (BOP) such as:
 - Single-stage Centrifugal pumps.
 - Multi-stage Centrifugal pumps.
 - Vertical axial flow pumps.
 - Vertical mixed flow pumps.
 - Double volute Centrifugal pumps.
 - Emergency Diesel Generator.
 - Rotary screw air compressors.
 - Plate type water/water heat exchange.
 - Travelling water screen and Trash racks.
 - HVAC systems.
- Operator of a Heat Recovery Steam Generator (HRSG) handling all the manual operations on level, pressure and flow control and the frequent start-up and shut down operations both from the field and the control room. Boxing-up and Conservation of HRSG.
- Operator of an Ansaldo Steam Turbine.
- Brainstorm with the shift operators and the senior operation engineer to help with troubleshooting new issues. Also, work as a team to tackle new challenges in the operation of the plant.

Dates : From May 2009 till Sep. 2010
Employer : Trust International Ltd. for Petroleum and Oil Services, Alexandria, Egypt
Job title : Project Engineer
Job Description : Drafting and finalizing P&IDs, Layouts and Hazard Area Classification Drawings for Gemsa Petroleum Company in two locations: the first location was Ras Gemsa, Red Sea, an onshore facility and offshore platform, the second one was a FPSO facility on board of Zaafarana Tanker docked in Gulf of Suez, Red Sea and a nearby platform.

Dates : From Sep. 2008 till Apr. 2009
Employer : Peugeot Roushdy Center, Alexandria
Job title : Maintenance & Reception Engineer
Job Description :

- As a Reception Engineer I was responsible of the client's first impression about wither can or can't we fix his vehicle, translating his complains into a technical work order.
- As a Maintenance Engineer, and with a team of technicians, the target was to fix the problems and perform the associated maintenance with the highest quality in the shortest time.
- Ensure client satisfaction. Aspiring to perfection and high-quality standards, constantly train and update my team and myself.
- Make sure the place of work is of good housekeeping and safe conditions.

Dates : From Jul. 2008 till Sep. 2008
Employer : Petroleum and Oil Constructions (POC), Alexandria
Job title : Site Engineer
Job Description : Managing and overseeing the finishing works on the buildings of WEPCO Company in its site in Mena El Hamra, El Alamien.

Skills:

- Project Engineer.
- Renewable Energy.
- Research Skills.
- Energy Analysis.
- Gas Turbines.
- Energy Efficiency.
- Steam Turbines.
- P&ID.
- HRSG.
- Isometric Drawings.
- Layout Diagrams.
- As built Drawings.
- Power Plant.
- Hazard Area Classification.
- Electrolysis Hydrogen Production.
- High Safety Awareness.