

101649-MEC-OS-E-1983
Operation & Commissioning Engineer / Trainer

Holds a B. Sc. in Mechanical Engineering and has 29 years international experience in operation of Power and Utilities Plants in Oil & Gas Industries, pre-commissioning, commissioning and training. Has worked with multinationals, public sector and private companies in different capacities at different countries.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 08/02/1961
Marital Status : Married

EDUCATION

: B. Sc. in Mechanical Engineering, 1983

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Certified V1 Internal Quality Assurance of the assessment process, by SQA.
- : Certified A1 Assessor-By SQA (Scottish Qualifications Authority) UK.
- : Certified Master Trainer, by Meric (UAE).
- : ISO 9001, Management skills, Presentation skills, Advanced Safety Auditing, Fire Fighting, Report writing, Safety Training and others.
- : Westinghouse Steam Turbine – Generator Operation.
- : Basic and Site Specific Training, Constituting a program of concentrated study of Power Plant Equipments and System Theory and Applications, by OVERSEAS BECHTEL INC.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2009 till now
Employer : ADGAS (Abu Dhabi Gas Liquefaction Company) – UAE:
Adgas is the producer of LNG & LPG and contains three LNG trains one of them being the largest in the world. Total capacity 6.0 million T/year. 80% of the production exported to Tepco, Japan.

- Project** : Das Island:
- Six-forced draft, gas-fired boilers, each has a rated capacity of 360 tons per hour of steam at a pressure of 60 bars and a temperature of 440° C.
 - Nine pumps each provide seawater cooling with a rated capacity of 165,000 cubic meters of water per hour.
 - Four firewater pumps each can provide 1200 cubic meters of water per hour to the firewater system.
 - Compressed air is provided for four Nitrogen production units, then dried, and supplied to all pneumatically operated instrumentation.
 - All the industrial fresh water requirements of the LNG plant are provided by three seawater desalination units, each of a production capacity of 80 tons per hour. Water required for boiler water feed is further treated in six demineralization units. There is an extensive steam condensate recovery system and recovery of condensate exceeds 95%.
 - Electric power generation of 127MW is provided by two steam turbine generators, each of 17.5MW and five gas turbine generators, each of 17.5MW except latest one of 22MW.
 - Whole plant controlled and operated through HONEYWELL TDC 3000 Distributed Control System (DCS).
 - In addition to supplying power to the LNG plant, the Utilities section provides the power requirements of the whole of Das Island.
- Job title** : Utilities Technical Instructor & Trainer
- Job Description** :
- Responsible for the development and implementation of training curriculums for developers (Engineers and Technicians).
 - Participating in the design and production of suitable training support material to ensure that the Competence Development Program Quality Standards are maintained and there is uniformity in the delivery of high standards training which includes both 'on and off job training'.
 - I'm now the focal trainer for boiler simulator attended unisum & dynsim and shadow plant training and carried out DSF, steady state, MAT tests and meetings. I have conducted courses related to the following topics of "Boilers, Turbines, Power Generation, etc".
 - Training the young professionals in accordance with Adgas Competence Assurance Management System (CAMS) and Technicians/Operators in accordance with Adgas Competence Assurance System (CAS) both in theoretical and practical activities as defined within the competency framework and planning the work-based activities appropriate to the development of the skills and knowledge of the Engineers, Technicians and Operators under development.
 - Utilizing the Competence Standards and associated documentation, develop and produce Personal Development Plans (PDPs) and Development Records (Individual File) of Develepees in close cooperation with the Develepees and the input of Line team members and other Training Centre staff.
 - Design, produce and deliver practical and theoretical Training for filling the gaps as identified by training needs analysis (TNA) on a regular basis.
 - Assist and support the training of others responsible for the development of the CAMS Engineers. Technicians/Operators including Line Assessors/Verifiers/Coaches.
 - Deliver 'short sharp' theoretical and practical courses emphasizing the acquisition of practical skills relevant to the job of the Develepees.

- Closely liaise with Line/Department to ensure the developpees (CAMS/CAS) are trained as per the expected Standards.
- Ensure the Young Professional Engineers/ Developpees maintain high Safety standards while participating in any activities.
- Closely monitor the progress of developpees and ensure that the training records are valid, complete and up to date with all necessary evidences as per standards.
- Involvement with on-job training activities and ensuring adequate training is received from line on daily basis.
- Streamline the Assessment process, in close contact with Assessors, and record on regular basis.

Dates : From Oct. 1992 till Dec. 2008

Employer : ADGAS (Abu Dhabi Gas Liquefaction Company) – UAE

Project : Das Island

Job title : Operations Controller

Job Description :

- Direct and supervise the activities of assigned Operations Shift personal on the LNG industrial facilities and performs supervisory functions at the level established by Management.
- Determine work priorities according to the importance, time constraints, logical sequence, and initiate actions to ensure the safe and efficient operation of the LNG trains and associated facilities.
- Prepare and issue appropriate Work Permits in accordance to company regulations. Promote HSE awareness among the team and maintain good safety standards during work activities by other departments.
- Co-ordinate start-ups and shutdowns of plant equipments. Directly responsible for leading control room and field operators ensuring major equipments is commissioned safely and efficiently prior to operation.
- Assume the responsibility as Incident Controller in the field and lead the activities in case of an emergency e.g. gas leak or fire. Control and direct subordinates in isolation of equipment to bring situation under control.
- Establish the standards and personally provides opportunities for training and development of employees under my direction and assesses their progress.
- Operating the plant through HONEYWELL TDC 3000 Distributed Control System (DCS).

Dates : From Jan. 1992 till Oct. 1992

Employer : The Egyptian Mineral and Salt Company
EMSAL is a private sector joint venture company to produce “Sodium Sulphate” from Qaroon Lake (Shak Shoke village, Al Fayoum).

Project : In Al Fayoum:

- It is a utility thermal power plant (two Units) with two diesel generators for emergency start each 680MW/HR tie in the same 11KV bus bar as the turbo-generators.
- Each unit consists of Bono boiler 34 ton/Hr 63 bar 460 °C main stream, with B.M.S. Control feeding Franco-Tosi Turbine (HP, LP), 2 Pass-Out steam 16,4 bar lines for the process users.

- The turbine tandem compound with Jeumont – Schneider 4.2MW air-cooled Turbo-Generator.
 - R.O. pre-treatment plant and ion exchange water treatment plant.
- Job title** : Senior Commissioning Engineer
- Job Description** :
- One-year contract, Seconded from Egyptian Electricity Authority (E.E.A.) as a Head of operation and commissioning team responsible for the commissioning and start-up for the utility plant.
 - Managing the interface between the project team and the other departments and developing an integrated team and work program.
 - Supervising a team of operation staff in the execution of commissioning / start-up and operations in the utilities.
 - Coordinating with assigned sub contractors on scheduled walk down & inspection test report (ITR).
 - Develop, maintain and issue other Turnover documents, for example, Punch List Management, as required by Turnover management.
 - Conducting commissioning / test run / start-up and to line up of all equipments in the utilities area such as cooling water pumps, fire water pumps & deluge system, instrument/ plant air system & compression, de-mineralized water plant, RO plant, steam turbine, steam boiler firing of burner, boiling/drying out, forced draft fan boiler feed pumps, 2 units steam generation boiler.
 - Monitoring/maintaining normal operation of newly commissioned equipments which have been put into service.
 - Training for Company operation staff.
 - Developing operating procedures and manuals for utility plant operations.
 - Conducting/monitoring all steam blowing activities during the shift until successfully accepted by vendors.
- Dates** : From Jan. 1989 till Jan. 1992
- Employer** : Egyptian Electricity Authority (E.E.A.)
- Project** : Shoubra El-Kheima Power Plant:
Four units 315MW each and 40MW Gas Turbine for black start, each unit consists of:
- Ansaldo 1100 ton/hr Dual fuel, Superheated/Reheat boiler – Burner Management System (BMS) control.
 - Westinghouse HP-IP-LP. Seven extraction steam turbine – Mechanical Electro-Hydraulic (M.E.H.) control.
 - 315MW hydrogen cooled Generator.
 - With the normal auxiliary equipment associated with a unit of this size (315MW).
 - Control of the unit through Load Demand Computer (LDC) and 7300 Westinghouse control system for the turbine (Screen and Keyboard Operation).
 - The unit equipped with Data Acquisition System for Alarm System, Sequence of events print out and data clearing computer system.
- Job title** : Shift Charge Engineer
- Job Description** :
- Reporting to Power Plant Operations Manager and fully responsible for the management and operation of the Power Plant during duty shift periods.
 - Managing and leading Operations Shift Group.

- In conjunction with Operations Superintendent ensuring the safe, reliable, environmentally and commercially efficient operation of the plant.
- Proactively promote the continuous development of Operations Shift Group technical knowledge and competencies during the mobilization, commissioning and operational phases of the power plant.
- Manage and being responsible for “Work Permit System” to ensure safety during all work performed on the Power Plant.
- Preparation of Incident reports with recommendation for future actions to avoid fault trips/ loss of production.
- Responsible for electrical isolations on electrical equipments up to 220KV.
- Authorized and responsible for maneuvers with dispatch center.
- The optimization of the plant to meet heat rate and availability requirements and all operational equipments.
- Active involvement in the Power Plant Risk Review and Contingency Planning processes.
- Development of Operational Contingency Plans taking lead role in preparation of Operations Shift Groups in response procedures.
- In conjunction with Operations Superintendent development of a practical and robust set of Standard Operating Procedures and Standing Instructions.
- Attend daily meeting between maintenance and operation to discuss status and to correct any deviations.
- Follow up maintenance activity progress during shift and outage activity during outage period.

Dates	:	From Sep. 1988 till Dec. 1988
Employer	:	Daelim Industrial Co. Ltd
Project	:	Mechanical & Piping Installation/Start-up & Operation for auxiliary system for Shoubra El-Kheima Power Station, unit 4 (315MW x 1 Unit) in Cairo
Job title	:	Senior Operator
Job Description	:	<ul style="list-style-type: none"> • Direct and coordinate the actions of Area Operators during 12 Hrs shift. • Identify source of problem and initiates corrective action during periods of unstable operation. • Coordinate the testing of automatic shutdown/protection systems. In radio communication with area operators, bypass trip circuits when individual systems are tested, closely monitoring unit conditions and ensuring that testing is completed quickly and efficiently to minimize the period instrument protection is negated. • Ensure equipment isolation during emergencies, full knowledge of fire fighting. • Check all essential unit equipment during duty shift. Check all area operators’ logs to ensure that essential information is being correctly recorded and that all operators are aware of operational changes and their consequences. • Individual system operation for aux. facility i.e. boiler feed water system, condensate system, circulating water system etc. • Aux. system operation for main turbine rolling. • Aux. system operating for 30 days reliability run.

Dates : From Feb. 1987 till Aug. 1988

Employer : Egyptian Electricity Authority (E.E.A.)

Project : Shoubra El-Kheima Power Plant

Job title : Assistant Shift Charge Engineer

Job Description :

- Reporting to the shift charge engineer.
- Coordinating team activities & resources, ensuring that all activities are carried out with full regard to statutory regulations, directives, procedures, safety rules.
- Ensuring that team resources, processes and activities are managed to maintain the effective & safe operation of the station, whilst optimizing thermal performance within the applicable operating regime.
- Maintaining an effective working relationship with National Grid Dispatcher Center.
- Providing support for the preparation of plant load demand, working with other teams to progress engineering solutions to plant & safety issues in line with allocated plant audit areas.
- Ensuring routine testing is completed to appropriate schedules and recorded.
- Investigating and diagnosing plant faults, instigating repairs, maintaining effective communications between all teams in the resource management of the station.
- Ensuring that standards of housekeeping are maintained, participating in and reporting on safety tours.
- Participating in the station emergency plan arrangements and also as incident controller, if required.
- Understanding the existing plant status and the expected plant operating requirements on taking over the shift and ensuring this information is disseminated to subordinate staff.
- Writing the station log and ensuring that incidents and major plant changes are recorded and reported and the following shifts have sufficient information on the plant status and operating requirements.

Dates : From May 1986 till Jan. 1987

Employer : Franco-Tosi (S.P.A.):
Franco-Tosi Ind. S.P.A was responsible for supply and install of 2 units steam turbine each 130MW, turbine HP and LP bypass, Recovery Hydraulic Turbine 2.4MW, Hydrogen and Chlorination plant. Franco Tosi was contractor for start-up / commissioning Aqaba Power Plant (Jordan) and also as consultant for Jordanian Electricity Authority with other contractors.

Project : Aqaba Power Plant Project – Jordan:
Aqaba Thermal Power Station project includes two units 315MW each. It comprises the HP and LP turbine bypass system. It is the first system in the Middle East, which has the water discharged from the outlet of the condenser to a Hydraulic Turbo-Generator to develop 2.4MW. The companies participating to the construction of the other parts of the power station are: Mitsubishi for the boilers, BBC for high voltage switchyard, FUDO for civil works.

Job title : Senior Start-up & Operations Engineer

Job Description :

- Franco Tosi turbines' start-up and operation responsible Engineer.
- Commissioning of all turbine protection tests.

- Commissioning of turbine HP and LP by-pass system.
- Turbine stress evaluator commissioning.
- Recovery hydraulic turbine start-up and commissioning.
- Hydrogen plant and Chlorination plant supervising.
- Training of Jordanian engineers and technicians.

- Dates** : From Jan. 1984 till May 1986
- Employer** : Egyptian Electricity Authority (E.E.A.)
- Project** : Shoubra El-Kheima Power Plant
- Job title** : Operations Engineer
- Job Description** : During this period I worked under the supervision of Bechtel Start-up and Operation Engineer (Overseas Bechtel Incorporated Company was plant consultant). Participated in start-up, commissioning and normal operation for unit # 1 (315MW), which includes:
- Monitor/maintain normal operation of newly commissioned equipments which have been put into service.
 - Follow up punch list items in coordination with sub contractors.
 - Commissioning / start-up & shutdown / operations of unit equipment as well as common equipment (cooling water, auxiliary boiler, gas turbine, jacket water system etc.)
 - Boiler (1100 t/h Ansaldo boiler) acceptance test as per ASME procedure representing Egyptian side as owner.
 - Operation of the unit during 30 days reliability test run.
 - Testing of automatic shutdown/protection systems.
 - SH steam line & boiler steam blowing activities.
 - Writing unit-1 log book recording all commissioning, start-up and operation activities for the next coming shift handover.
 - System Mechanical Acceptance Packages (SMCP) to support system completion plan and participate in pre-commissioning start-up activities, mechanical completion checks, pressure tests, equipment primary running tests, etc.
- Field of experience** :
- OJT / Boiler Simulator Instructor.
 - Utilities Training.
 - Huge, medium, small package boilers.
 - Steam and Gas turbines with different capacities.
 - Multiple process and utility units.
 - Power plants with all associated equipment.
 - Power plants and utilities pre-commissioning tests and procedures.
 - Power plants and utilities commissioning “plant reliability” test.
 - Boilers acceptance test according ASME codes.
 - High degree of commitment to HSE (Health & Safety and Environment) excellence. Support plant safety, health and environment policies programs.