**100098-MEC-OS-E-2002**
Operation, Commissioning & Start-up Engineer

Holds a B. Sc. in Mechanical Engineering and has over 8 years hands-on experience in power generating stations, from construction to commissioning, start-up and operation.

## PERSONAL DATA

| | | |
|---|---|---|
| Nationality | : | Egyptian |
| Birth Date | : | 16/08/1978 |
| Marital Status | : | Married |

## EDUCATION

: B. Sc. in Mechanical Engineering, Alexandria University, 2002

## LANGUAGES

| | | |
|---|---|---|
| Arabic | : | Native Language |
| English | : | Good |

## COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoCAD, MATLAB
: Macro Media, Flash, Photoshop

## TRAINING COURSES AND CERTIFICATIONS

: Training at Damanhour Power Station (3x65MW).
: Training at Damanhour Power Station (325MW).
: Training course in Operating of Power Station at Abo Qir Training Center.
: Training at El-Amria Oil Company.

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Jul. 2008 till now
**Employer** : INITIC ENERGIA
**Project** : Nubaria Combined Cycle Power Station III (750MW)
**Job title** : Commissioning, Start-up & Operation Engineer
**Job Description** :

- Make up and supply system.
- Closed cycle cooling water system.
- Service water system.
- Hydrogen plant system.

- Compressed air system.
- Demi-water plant.
- Pipe line.
- Hydro test of all pipe line.
- Flashing.
- Closed cooling system.
- Start-up service water system.
- Start-up closed cooling system.
- Fire fighting piping system (combined cycle).
- Closed cooling water piping system (combined cycle).
- Service water piping system flushing procedure (combined cycle).
- Closed cooling water piping system air blowing procedure (combined cycle).
- Fire fighting piping system (simple cycle).
- Closed cooling water piping system flushing procedure (combined cycle).
- Pneumatic test procedure.
- STG lube oil piping system.
- Hydraulic pressure testing procedure.
- STG jacking oil piping system.
- Cleaning the lubrication oil system of steam turbine.
- Condensate recovery, storage and transfer system flushing procedure.
- Fit protection system operation and functional test procedure.
- Control building cable room pre-action system.

**Dates** : From Jul. 2007 till Apr. 2008

**Project** : Syria Zayzoon Combined Cycle Power Plant:
3x100MW GE Gas Turbine, 1x156MW SIEMENS Steam Turbine, 3 Boiler LP and HP KDP Co.

**Job title** : Shift Charge Engineer / Commissioning, Start-up & Operation Engineer

**Job Description** : As Shift Charge Engineer:

- Supervise the shift operators and manage the shift duties.
- Perform isolation and safety tag out of equipment and issue all types of work permits including high voltage isolations.
- Train operators in the proper care of equipment.
- Assisted in the development review and implementation of operations procedures.
- Report to the operation manager and attend meetings.

As Commissioning, Start-up & Operation Engineer:

- Make up and supply system.
- Condensate water system.
- Feed water system.
- Closed cycle cooling water system.
- Circulating water system.
- Service water system.
- Heaters vent and drain system.
- Turbine extraction steam system.
- Hydrogen plant system.
- Compressed air system.
- Demi-water plant.

3 GT 100MW GE, 1 ST 156MW SIEMENS:

- Chemical cleaning.
- Blow out test.
- Safety HP dram test and control in HP and LP drum manual during test from DCS control.
- Steam buarety.
- Start-up boilers.
- Shut down boilers.
- By pass operation to the condenser.
- Work in cooling water.
- Cooling tour neutral operation.

Contain 6 sectors, control the vacuum by open and close the lover of the sector:

- Poster pump.
- 3 condensate pump.
- Polishing plant 2 line.
- Make back wash.
- Regeneration.
- Start-up polishing.
- Shut down polishing.
- 1 feed water pump.
- Make vacuum by vacuum pump in feed water.
- 9 LP feed water pump.
- 9 HP fed water pump.
- Start-up and shut down LP, HP pumps from program.
- Make mechanical isolation to the pumps.
- 2 HP circulation pump.
- 2 LP circulation pump.
- To every boiler.
- Start-up pump.
- Shut down pump.
- Change over.
- Start-up steam turbine.
- Shut down steam turbine.
- Hydraulic test to the boiler over than 80 Bar.

**Dates** : From Nov. 2002 till Jul. 2006

**Employer** : West Delta Company for Electric Generation (Zawyet Gazal)

**Project** : Combined Cycle Power Plant:
4 GT Frame 5 gas turbine units, 4 Heat Recovery steam generators and steam turbine units of 68MVA and its auxiliaries

**Job title** : Operation Engineer

**Job Description** :

- DCS control system, Mark V control system.
- Units start-up, shutdown procedures emergency operation.
- Feed water system.
- Closed cycle cooling water system.
- Main and aux cooling water system.
- Service water system.
- Heaters vent and drain system.
- Turbine extraction steam system.

- Condensate polishing plant.
- Chemical feed system.
- Air distribution system.
- Steam and water analysis system.
- Live steam, cold and hot reheats system.
- Aux. steam system.
- Service gases distribution system.
- Main turbine and generator and its auxiliaries:
  - Turbine lubricating system.
  - Turbine jacking and turning system.
  - Turbine drains system.
  - Turbine gland steam sealing system.
  - Turbine governing and safety system.
  - Turbine control fluid system.
  - Generator seal oil system.
  - Generator gas system.
  - Generator stator cooling system.
  - Condenser and water box air removal system.
  - Circulating water system.
  - Service water System.
  - Hydrogen plant system.
  - Compressed air system.
  - Traveling band screen system.
  - Trash rack system.
  - Sump pump system.
  - Demi water plant.
  - Desalination plant.
  - Chemical feed system.

**Field of experience :**

- Managing the projects and systems from walk down and receiving from the construction staff to the operation staff through the pre-commissioning, commissioning, functional tests, performance test and reliability run.
- Working in the following systems and equipments from the pre-commissioning phase till the normal operations phase:
  - Steam / Gas turbines.
  - Boilers / HRSG.
  - Feed water systems.
  - Cooling water systems.
  - Demi water plants.
  - Waste treatment water systems.
  - Compressed air systems.
  - Service water system.
  - LNG and all utilities and auxiliaries.