Holds a B. Sc. in Mechanical Power Engineering and has over 29 years experience working in maintenance, operation, commissioning and start-up at Power Plants (Steam, Gas and Combined Cycle).

### PERSONAL DATA

| Nationality    | : | Egyptian      |
|----------------|---|---------------|
| Birth Date     | : | 07/01/1968    |
| Gender         | : | Male          |
| Marital Status | : | Married       |
| Residence      | : | Currently KSA |

# EDUCATION

: B. Sc. in Mechanical Power Engineering, Alexandria University, 1993

# LANGUAGES

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

#### **COMPUTER SKILLS**

: Windows, MS Office, Internet

# TRAINING COURSES AND CERTIFICATIONS

- : Introduction of thermal power plants course (Abu Qir).
- : Advanced course in thermal power plants (Abu Qir) processing operation principles and operation.
- : Advanced course in water treatment.
- : Siemens turbine operation.
- : DCS Operation for Boiler and steam turbine (Start-up, Shutdown, General situations...).
- : Advanced courses in Desalination units.
- : Advanced courses in Chlorination units.
- : Advanced courses in Demineralization units.
- : Various Fire Fighting trainings.
- : Handling of all kinds of personal safety equipment and breathing equipment.
- : Fire prevention training.
- : Firefighting extinguishers types.
- : First Aid advanced course.

- : Chemical equipment and material handling and storage.
- : ISO 14001 training.
- : ISO 18001 training.
- : ISO 9001 training.
- : Environmental training.
- : Pollutants training.
- : Hazards Chemicals training.

### CHRONOLOGICAL EXPERIENCE RECORD

| Dates           | : From Jan. 2020 till now   |
|-----------------|---|
| Project         | : Yanbu Power and Distillate Plant phase III 5 units x 627MW and 6 MSF x 4000 m3/hour   |
| Job title       | : O&M Manager Assistant   |
| Dates           | : From Sep. 2014 till Jan. 2020   |
| Project         | New Abu Qir Power Plant (2x650MW)   |
| Job title       |   |
| Job Description | <ul> <li>Steam Turbine Maintenance Engineer</li> <li>Following up &amp; Maintenance (all types of Maintenance) &amp; assembly and re-assembly (for the most) for the following equipment's: <ul> <li>Pumps (such as horizontal multi stage centrifugal feed water P/P, vertical multi stage semi axial flow condensate P/P, vertical semi axial flow circulate P/P, service, closed cooling and Waste P/Ps).</li> <li>Compressors (multi stage centrifugal air compressor and multi stage reciprocating hydrogen compressor).</li> <li>Vacuum pumps.</li> <li>Valves.</li> <li>Heat exchangers.</li> <li>Rotating Filters (such as debris, self-cleaning and travelling screen filters).</li> <li>Air dryer.</li> <li>Steam turbine.</li> </ul> </li> </ul> |
| Dates           | : From Jan. 2005 till Aug. 2014   |
| Employer        | : Electricité De France (EDF)   |
| Project         | : Suez Gulf Steam Power Station (2x364MW):  |
|                 | The unit consist of:  |
|                 | <ul> <li>High capacity boiler Foster Wheeler (178 bar, 543°C, 1065 t/h),<br/>Natural circulation, Natural gas / heavy fuel oil firing.</li> <li>TOSHIBA turbine: (2x364MW), two-cylinder Hp-IP and LP.</li> <li>TOSHIBA generator (18KV, 460MVA) with hydrogen and water-<br/>cooling system.</li> <li>Power Plant auxiliaries: One black start gas turbine (12MW-Solar fuel oil-<br/>1500 rpm) (TUMA TURBOMACK), Auxiliary boiler (50 t/h - 17bar -<br/>350 °C) (BABCOCK), 2 Desalinations units, Demineralization and Electro<br/>chlorination units, Diesel Engine for Emergency Service (980KW), GIS<br/>220KV electrical breakers (ALSTOM SF6 gas Insulation), All type of<br/>Compressors, Pumps, Valves and Transformers.</li> </ul>                 |

| Job title<br>Job Description                                 | <ul> <li>Shift Charge Engineer</li> <li>Shift management.</li> <li>Maneuvers with dispatch center.</li> <li>Carry out all the locking works for safety work permits.</li> <li>Ensuring safe, efficient and economical running of the plant.</li> <li>Trouble shooting and preventive maintenance during the shift.</li> <li>Monitoring and operating the plant equipments (Boiler, Turbine, Generator) from the central control room by DCS.</li> <li>Optimize the plant operation.</li> <li>Maintain detailed operation logs for all operation activities.</li> <li>Check and review the operating conditions and records to investigate the weak and troubles.</li> <li>Supervising and controlling the power plant operation (start-up, Normal operation and shut down.</li> <li>Perform the technical analysis for the defects.</li> <li>Perform site inspections of equipments machinery during construction.</li> </ul> |
|--|---|
| Dates<br>Project   | <ul> <li>From Jul. 2001 till Dec. 2004</li> <li>Sidi Krir Power Plant units 1 &amp; 2:</li> <li>Babcock &amp; Wilcox Boiler (1100 t/h, 160 bar, 540 °C), natural circulation, natural gas &amp; heavy fuel oil, Siemens steam turbine 325MW, DCS control system, all type of valves, pumps &amp; compressors.</li> <li>Power Plant auxiliaries: Auxiliary boiler (50 t/h - 17bar - 350 °C) (BABCOCK), 2 Desalinations units, Demineralization and Electro chlorination units, Diesel Engine for Emergency Service (980KW), GIS 220KV electrical breakers (Group Schneider SF6 gas Insulation), all type of Compressors, Pumps, Valves and Transformers.</li> </ul>  |
| Job title<br>Job Description                                 | <ul> <li>Shift Supervisor</li> <li>Perform &amp; Review the project and preliminary design report (plan, Schedule, Cost, Environmental).</li> <li>Perform &amp; Review the Engineering and design report for all power station systems.</li> <li>Perform &amp; Review the contract documents &amp; planning and supervising construction.</li> <li>Program &amp; Monitoring and reporting construction progress.</li> <li>Perform &amp; Review the Tender Documents.</li> <li>Commissioning &amp; Start Up and Testes of all Mechanical equipment's (Combustion Turbine Generator, Steam Turbine Generator, Heat Recovery Boiler, Demineralization Plant, Pumps, Compressor, Valves, Auxiliary Boiler, Chlorination plant, Mazout Tanks Diesel Engine for Emergency Service.</li> </ul>   |
| Dates<br>Employer<br>Project<br>Job title<br>Job Description | <ul> <li>From May 2000 till Jun. 2001</li> <li>SIEMENS AG Power Generation Group (KWU) turbine contractor</li> <li>Sidi Krir (2x325MW)</li> <li>Commissioning Engineer</li> <li>Under supervision from SIEMENS commissioning for the following systems: <ul> <li>Lube oil system.</li> <li>Generator seal oil system.</li> <li>Generator gas supply.</li> </ul> </li> </ul>   |

|                      | <ul> <li>Condenser evacuation system.</li> <li>Turbine seal steam system.</li> <li>Control oil system.</li> </ul>  |
|----------------------|--|
| Project<br>Job title | <ul> <li>From Aug. 1998 till Apr. 2000</li> <li>Sidi Krir Power Plant (2x325MW)</li> <li>Commissioning &amp; Start-up Engineer</li> <li>Carry out as OM Supervisor for steam contract of steam turbine SIEMENS to follow with the consultant for walk down, turn-over from contracture department to start-up and commissioning department, then follow with start-up and commissioning staff the following scope of the work:</li> <li>Loop check for all cycle's i.e. (water cooling, hydrogen cooling, steam seal, lube hydraulic oil system).</li> <li>Hydraulic test for piping, flushing for water piping, chemical cleaning for lube oil system, steam blowing for steam pipes).</li> </ul>   |
| Dates<br>Project     | From Jun. 1995 till Dec. 1997<br>Abu Qir Power Plant 900MW (4x150MW + 1x300MW)   |
| Further experiences  | <ul> <li>Support the Commissioning team in New Assiut Combined Power Plant 2x750MW as a Commissioning Manager.</li> <li>Support the BP Mechanical Commissioning team in West Nile Delta project (oil &amp; gas).</li> </ul>  |
| Field of experience  | <ul> <li>Areas of Specialization: <ul> <li>Managing of Safety Management System.</li> <li>Risk Assessments.</li> <li>Staff Training/Development.</li> <li>Reporting Techniques.</li> <li>Accident Investigations/Reporting/RCA.</li> <li>Engineering &amp; Administration Control.</li> <li>Computer Literacy.</li> <li>ERP &amp; LOTO Application.</li> <li>Safety Auditing.</li> <li>Rigging Safety &amp; Inspection.</li> <li>Use effective strategies to minimize risks.</li> </ul> </li> <li>Technical Qualification: <ul> <li>DCS operation and maintenance.</li> <li>Commissioning experience.</li> <li>Generators: <ul> <li>18KV TOSHIBA hydrogen and stator cooling water.</li> <li>21KV Siemens hydrogen and stator cooling water.</li> <li>Transformers: Types of transformer (step up, step down, air and oil cooling).</li> </ul> </li> <li>Gas Turbines: <ul> <li>Siemens 15MW black out gas turbine.</li> <li>TUMA TURBOMACH 13MW black out gas turbine.</li> </ul> </li> </ul></li></ul> |

- 220KV switchyards.
- Circuit breakers 6.6KV,18KV, 220KV.
- Protection relays types.
- Diesel motor generator 1MW.
- Boilers:
  - ✤ STAIN boilers 164 bar, 1024 ton/hour, 540 °C.
  - ✤ FOOSTER WHEELER boilers 173 bar 1100 ton/hour 540 °C.
  - ✤ STAIN boilers 164 bar, 1024 ton/hour, 540 °C.
  - Babcock and Wilcox boilers 166 bar 1100 ton/hour 540 °C.
  - ✤ Alstom Boiler 166 bar 2170 ton/hour 540 °C.
- Steam Turbines:
  - Siemens Turbine (3 sections).
  - TOSHIBA Turbine (3 sections).
  - Mitsubishi Turbine.
- Desalination units (PLC operation).
- Chlorination units (PLC operation).
- Demineralization plants (PLC operation).
- Aux. boilers (PLC or disk operation): BABCOCK BORSIG 14 Bar, 45 ton/hour.