#### 103956-MEC-CMOS-E-2000

## Gas Turbine Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 17 years hands-on experience working in construction, maintenance, operation, commissioning and start-up at several Power Plants.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 05/01/1976

Gender : Male

Marital Status : Married

Residence : Damanhour

## **EDUCATION**

B. Sc. in Mechanical Power Engineering, Alexandria University, 2000

### LANGUAGES

Arabic : Native Language

English : Very Good

## **COMPUTER SKILLS**

: Windows, MS Office, Internet

# TRAINING COURSES AND CERTIFICATIONS

: Basic operation training Siemens, MDEPC, EGYPT (Apr. 2004).

: Basic operation training Siemens, LUBBENAU – GERMANY (Jul. 2004).

: Mechanical maintenance training by Siemens, BERLIN – GERMANY (Dec.

2004).

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From 2016 till now

**Employer** : <u>EGYPTROL</u>, SIEMENS AG Subcontractor

**Project**: New Capital PP

Dates : In 2016 Employer : MDEPC

**Project** : Nubaria Module III - Egypt (2x250MW GE gas turbines frame 9 FA)

Job title : Gas Turbine (9FA) Maintenance Engineer

Job Description

- Attend 9FA.03 DLN 2.6+XD5 DF, AGP, CDM, CTM modification.
- Inspect and control all materials supplied by GE.
- Conversion to Low dP DLN 2.6+XD5 Combustion System.
- New Dual Fuel Nozzle.
- Accessories Modification for DLN 2.6+XD5 Dual Fuel upgrade.
- AGP package A upgrade.
- 9th and 13th Stage Extraction Flow Modulation (EFM).
- Case Temperature Management (CTM).
- Attend & Supervision CI (2 times).
- Attend & Supervision HGP (2 times).

Dates : From Apr. 2014 till Dec. 2015

**Employer** : MDEPC

Project: Nubaria Module III - Egypt (2x250MW GE gas turbines frame 9 FA),

2 Horizontal HRSG (STF), 1 Steam turbine ALOSTOM (250MW)

Job title : Operation Coordinator

Job Description : • Arrange deadly report.

• Open the work permit with all required safety procedure.

Attend weekly meeting.

• Arrange for gas turbine CI and steam turbine auxiliary over all

maintenance.

Dates: From Apr. 2013 till Jan. 2014

**Employer** : Al Toukhy Company for Industry, Trading & Contracting – KSA

**Project**: Generation Expansion at Najran Power Plant Extention

Job title : Lead Mechanical Engineer

Job Description

Responsibilities during Erection / Installation / Commissioning and Start-up

phase:

• GE Frame 7 EA turbo Generator Units, Mechanical and Mark VI Control (2x65MW).

- Supervised for generator and accessory module fixators installation and alignment.
- Lube/Hydraulic oil system, motors rotation check with the required system flashing.
- LP co2 tank installation, interconnecting piping with the turbine at 3 zones.
- Lp co2 concentration test apply as per GE recommendation.
- Exhaust frame blower installation and alignment (88 TK 1, 2).
- Vent fan installation alignment and motor rotation check (88 BT 1, 2).
- Lube and hydro oil piping installation and hydro test.
- 2 phase lube oil flushing as per GE procedure.
- Exhaust stacks installation, insulation, welding, and barrier wall cladding fabrication.
- Turbine Over head crane (35 ton) installation, and rail way beam alignment (ital crane).
- Generator Over head crane (45 ton) installation, and rail way beam alignment (ital crane).
- GE lube oil filtration unit installation and start-up.
- HVAC unit PACU1 and PACU 2 installation, connecting with main switch

gear duct and BOP switches gear building duct.

Dates : From Apr. 2012 till Mar. 2013

**Employer** : Al Toukhy Company for Industry, Trading & Contracting – KSA

**Project**: Generation Expansion at Tabouk Power Plant

Job title : Lead Mechanical Engineer

Job Description : Responsibilities during Erection / Installation / Commissioning and Start-up

phase:

 GE Frame 7 EA turbo Generator Units, Mechanical and Mark VI Control (2x65MW).

 Atlas Copco Air Compressors installation and inter connecting piping leak test application.

 Supervised for generator and accessory module fixators installation and alignment.

 Lube/Hydraulic oil system, motors rotation check with the required system flashing.

• Lube and hydro oil piping installation and hydro test.

2 phase lube oil flushing as per GE procedure.

• Exhaust stacks installation, insulation, welding, and barrier wall cladding fabrication (SAI)...

• Over head crane (45 ton) installation, and rail way beam alignment (kone crane).

Dates : From Jun. 2008 till Mar. 2012

**Employer** : Al Toukhy Company for Industry, Trading & Contracting – KSA

**Project** : Generation Expansion at Faras Power Plant

Job title : Site Mechanical Engineer

Job Description : Responsibilities during Erection / Installation / Commissioning and Start-up

phase:

 GE Frame 7 FA turbo Generator Units (4x150MW), Mechanical and Mark VI Control TAs.

 Atlas Copco Air Compressors installation and inter connecting piping leak test application.

Supervised for turbine and generator fixators installation.

Sliding the turbine and generator on fountain.

Supervised drop check for 4 units.

Supervised rough and final alignment for 4 units.

Raising RFI for final completion.

Supervised Lube oil flushing with respecting GE procedure.

Load coupling installation.

• Punch list item close out.

• Leak test and air below for all turbine piping systems with respecting the GE recommendation.

ISO PHASE BUS DUCT steel structure installation and duct alignment.

Dates : From Jan. 2008 till May 2008

**Employer** : Al Toukhy Company for Industry, Trading & Contracting – KSA

**Project**: Generation Expansion at KSA Riyadh PP#08 Ext. III

**Job title** : Site Mechanical Engineer for four (4) units GE Frame 7FA Turbo-Generator

#### set / Installation Engineer

#### Job Description

- The following GTG auxiliaries and systems as reference:
  - GE Air intake filters erection//installation as per GE Drawing with the required air piping Leak Test (1.1 from the design pressure) just to put the system ready for proper connection with GE Air Processing Unit (APU) for online cleaning service / BOP Atlas Copco Air Compressor for off-line cleaning service.
  - GE Fin Fan Cooler installation and commissioning.
  - GE Cooling water pumps skid testing and flushing procedure for the system.
  - Lube/Hydraulic oil system, motors rotation check with the required system flashing.
  - GTG PEECC.
  - Exhaust stacks installation, insulation, welding, and barrier wall cladding fabrication.
  - Exhaust stack high temperature paint application (silicon aluminum 600 c).
- Supervising GTG Customer piping fabrication/welding/installation, hydro/leak testing and commissioning/flushing if required as per the approved drawing and site condition for the follows:
  - Inlet bleed heat piping installation and leak test application.
  - Generator and Turbine Cooling Water CS supply and return pipe lines, with the required orifices installation for cooling water flow rate adjustment as per GE design/drawing.
  - GE turbine compartments Fire Fighting CO2 pipe lines connection with F.F.LP CO2 tank with respecting to puff and concentration test.
  - Water Wash SS pipe line with the required insulation/cladding.

Dates : From Dec. 2004 till Dec. 2007

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**Employer** : MDEPC (Middle Delta Electricity Production Company)

Project : NUBARIA Combined Cycle 1500MW

Job title : Turbine Operation Shift / Site Engineer

**Job Description** 

- Carry out all the required O&M activities as per manufacture recommendation.
- Assist Gas Turbine operation personnel on daily basis to achieve the optimum operating conditions for the Gas Turbines and keep the power station in the highest available Level of performance and operating conditions.
- Responsible for daily report.
- Safe operation for GTG Siemens (4x250MW) and all auxiliaries during the reliability period.
- Energizing of 500KV and 220KV switchyard.
- Switchgear 6.3KV and MCC 400 V for all plant auxiliaries.

Dates : From May 2003 till Nov. 2004

**Employer** : WDEPC

**Project**: Damanhour Combined Cycle

Job Description : Operation Engineer for 4 gas turbines - Hitachi (4x25MW) with GE steam

turbine 55MW.

#### Field of experience:

- Gas Turbine Erection, Installation Engineer.
- Rotating Equipment Maintenance & Operation Mechanical Engineer.
- Piping Fabrication, Installation and Testing Supervision Engineer.
- GE Frame 7FA (140MW) Turbine-Generator units mechanical equipment erection, installation, raising RFI after internal checking and testing with respect to manufacture requirement under direct supervision from GE TA at Site (from Jan. 2008 till Mar. 2012).
- GE Frame 7EA (65MW) Turbine-Generator units mechanical equipment erection, installation, raising RFI after internal checking and testing with respect to manufacture requirement under direct supervision from GE TA at Site (from Apr. 2012 till Oct. 2013).
- Rotating Equipment inspection and overhaul plans preparation and execution according to vendor recommendation.
- Change the "R0" first stage 7FA compressor rotating blades (32 NO).
- Oil bath heater "FIRONTINI ITALY" installation, start-up and commissioning.
- Turbine Operation Engineer for the following turbine types:
  - 4 Hitachi gas turbines (4x25MW), 4 vertical HRSG with one GE steam turbine in Damanhour Egypt.
  - 4 Siemens gas turbines (4x250MW), 4 Alstom horizontal HRSG,
     2 Mitsubishi steam turbines (250MW) in Nubaria Egypt.