

## 100660-ELE-1568CDMOSTiyz-E-2010

### Electr. Installation, Commissioning, Testing & Maintenance Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 12 years experience working in construction, design, maintenance, operation, testing, commissioning and start-up.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 01/10/1987  
Gender : Male  
Marital Status : Married  
Residence : Giza, Cairo

## EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Al-Azhar University, 2010

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

: Windows, MS Office, Internet  
: AutoCAD  
: Matlab  
: Revit  
: Dialux  
: ETAP  
: Microstation

## TRAINING COURSES AND CERTIFICATIONS

: Primary & Secondary Substation Design.  
: Basic Operating Training by Ansaldo (Aug. 2012).  
: Transformers, Tamini (Apr. 2012).  
: GIS (Gas Insulation Station) operating and maintenance training, ABB (Mar. 2012)  
: PLC 200, Salesian Institute (DON BOSCO) (from Oct. till Dec. 2009).  
: Control by contactors, Salesian Institute (DON BOSCO) (from Jun. till Sep. 2009).  
: PLC (1200, 300), Drives, HMI & SCADA in Siemens.

- : International Computer Driving License (ICDL).
- : Training at Shoubra Factory (27 Army Factory) (Aug. 2008).
- : Training at ABB Factory, 10<sup>th</sup> of Ramadan (Sep. 2008).
- : Basics of the Distribution Power Plants, South Cairo Electric Distribution Co. (Jul. 2008).
- : Basics of Oil Refining Plants, Assiut Oil Refining Co. (Jul. 2007).
- : AutoCAD 2D
- : Matlab

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Dec. 2017 till now
- Employer** : Cairo Electricity Production Company (CEPC)
- Project** : 6th October CCPP (1500MW) (PH#2 & PH#3)
- Job title** : Electrical Installing, Commissioning, Testing & Maintenance Engineer
- Job Description** : Commission, test and perform all periodic and corrective maintenance the following:
- ABB Relays REC670, REG670, RED670, RET670, REF615, REM615 & REU615.
  - GT 4x150MW Gas turbine Ansaldo Energia, GCB, Exciter, SFC and other turbine auxiliaries.
  - ST 325MW steam turbine Ansaldo Energia GCB, Exciter and other turbine auxiliaries.
  - Main transformer for gas turbine (15.75/220KV) and unit transformer (15.75/6.3KV).
  - Main transformer for steam turbine (20/220KV), unit transformer (20/6.3KV) & start-up transformer (220/6.3KV).
  - GIS Switchyard with A 220KV GIS S/S ABB ELK14 one and half circuit breaker and perform C.B Timing, C.T Test, V.T Test & Interlock of GIS internally and power plant.
  - ABB 6.3KV Switchgear and M.V dry transformer 6.3/0.4KV.
  - ABB 400V Panel Board.

- Dates** : From Jul. 2019 till now (Freelancer)
- Job title** : Electrical Design Engineer
- Job Description** :
- Carry out all electrical design and review activities (power, lighting and low current) for many projects in (EGYPT, SAUDI ARABIA, KUWAIT & DUBAI) like (Airports, Malls, Compounds, Factories, Universities and Infra Structure).
  - Carry out all shop-drawing activities.
  - Full acknowledge and using (AUTOCAD, REVIT, ETAP, DIALUX and ECODIAL).

- Dates** : From Dec. 2014 till Dec. 2017
- Employer** : Cairo Electricity Production Company (CEPC)
- Project** : 6th October CCPP
- Job title** : Commissioning, Start-up & Operation Engineer

**Job Description** : • Commissioning and start-up for one 325MW Ansaldo Energia steam turbine unit with air cooled condenser (ACC) and four horizontal Ansaldo Caldaie boiler.

- Perform first operation tests and first start-up for (lube oil system, seal oil system, vacuum system, and gland steam and gland steam condenser).
- Making first rolling for STG.
- Making first synchronization for STG.
- Steam Blowing for Ansaldo Caldaie HRSGs & Steam Piping.
- Commissioning, Start-up and Operation for HRSG & Steam Turbine.
- Attending all tests on STG (Partial stroke test, Total stroke test, Tightness test, Trip block test and over speed (110% & 112%) tests).
- Deal, monitor, trouble shoot and control the operation using DCS system ((ABB Symphony plus) & (Emerson Ovation)) as the following:
  - Four Ansaldo Energia gas turbines 4x150MW.
  - One Ansaldo Energia Steam turbine 1x325MW.
  - Four generators for GT & ONE generator for ST.
  - Four Ansaldo Caldaie HRSGs.
  - Five main transformer Four as (15.75/220KV) & one as (20.0/220KV).
  - Start-up service transformer (6.3/220KV).
  - Medium and low voltage switch gears (6.3KV, 400V).
  - 220KV GIS S/S switch yard.
  - Auxiliary transformer, excitation transformer & Static frequency controller (SFC) transformer.
  - Motors control center & lighting panel.
  - Module auxiliaries (motors, pumps, HVAC).
  - Two emergency diesel generators.

**Dates** : From Jan. 2013 till Dec. 2014

**Employer** : Cairo Electricity Production Company (CEPC)

**Project** : 6th October 4x150MW simple cycles gas turbine (PH#1)

**Job title** : Operating Engineer

**Job Description** : Deal, monitor, trouble shoot and control the operation using DCS system (ABB Symphony plus) as the following:

- Four Ansaldo Energia gas turbines 4x150MW.
- Four main transformer 15.75/220KV, Auxiliary transformer, excitation transformer & Static frequency controller (SFC) transformer.
- Medium and low voltage switch gears (6.3KV, 400V).
- 220KV GIS S/S switch yard.
- Motors control center & lighting panel.
- Module auxiliaries (motors, pumps, HVAC).
- Four generators & two emergency diesel generators (2x250 KW).
- Water treatment station.

**Dates** : From Sep. 2011 till Dec. 2012

**Employer** : Cairo Electricity Production Company (CEPC)

**Project** : 6th October 4x150MW simple cycles gas turbine (PH#1)

**Job title** : Electrical Installing, Commissioning & Testing Engineer

**Job Description** : Commission and test the following:

- ABB Relays REC670, REG670, RED670, RET670, REF615, REM615 & REU615.
- GT x 150MW Gas turbine Ansaldo Energia & its Auxiliaries.
- Main transformer (step up trafo) 15.75/220KV / and unit transformer 15.75/6.3KV.
- GIS Switchyard with A 220KV GIS S/S ABB ELK14 one and half circuit breaker and perform C.B Timing, C.T Test, V.T Test & Interlock of GIS internally and power plant.
- ABB 6.3KV Switchgear.

**Dates** : From Jan. 2013 till Jun. 2019 (part time - reach to 150 hr. / month)

**Employer** : Crown Home Consulting Company, Cairo

**Job title** : Electrical Design Engineer

**Job Description** :

- Carry out all electrical design and review activities (power, lighting and low current) for many projects in (EGYPT, SAUDI ARABIA, KUWAIT & DUBAI) like (Airports, Malls, Compounds, Factories, Universities and Infra Structure).
- Carry out all shop-drawing activities.
- Full acknowledge and using (AUTOCAD, REVIT, ETAP, DIALUX and ECODIAL).

**Dates** : From Oct. 2010 till Sep. 2011

**Employer** : Golden Pack Group for Good Industries, 6<sup>th</sup> October

**Job title** : Electrical Installation & Maintenance Engineer

**Job Description** :

- Maintain the machines, PLC, Drives, measure instruments and all of the control parts.
- Design and install the control of the machines to perform its wanted job.
- Design and install the all of electrical power part for a new factory.

**Dates** : From Aug. 2010 till Oct. 2010

**Employer** : Optimum Engineering Company, Maadi

**Project** : Helwan Waste Water Treatment Plant

**Job title** : Operation & Maintenance Engineer

**Job Description** :

- Operate and maintain the (level, flow meter, PH, D.O, Pressure and .....etc.) instruments.
- Operate and maintain (PLC S7 200 micro).
- Operate and maintain HMI.
- Operate and maintain electric power equipments like (transformers, circuit breakers, .....etc.).
- Take an idea about the equipments of HV and MV test like an injection voltage equipments and TAN DELTA equipment for testing the transformer.

**Dates** : From Jun. 2010 till Aug. 2010

**Employer** : NORMS Engineering Co.

**Project** : Health Care field (sterilization)

**Job title** : Installation & Maintenance Engineer

- Job Description** :
- Design the sterilization equipment place.
  - Install the sterilization equipment.
  - Maintain the sterilization equipment.

**Projects:**

- Power Plant Projects:
  - 3 Phases of October Generators and GIS Power Plant Project - Abo-Rawash, Egypt (1500MW) (from 2011 till now).
- Building Projects (Residential, Administration, Educational, Healthcare, Hotels and Industrial):
  - King Abdul-Aziz International Airport (Passenger Terminal Building), (Air Traffic Control Tower), (Railway Station) MEP Shop Drawings.
  - Crystal Office Building – New Cairo – Egypt.
  - QNB Alahly, Burj Ellamae Branch, Giza, Egypt (Electrical Design – Energy Efficiency Enhancement).
  - Cleopatra Plaza Tower – Nasr City – Cairo – Egypt (Electrical Design - 2B+G+Mez+9 Residential – 4.5MVA).
  - Mobinil Administration and Customer Services Building – Smart Village – Cairo – Egypt (Electrical Design – B+G+3, 4.0 MVA).
  - Tehrab Hotel JVT - Dubai – UAE (5 Stars Hotel Building).
  - Khalilia Hospital - Arish, Egypt (40 Bed - 1.5 M.VA, Design).
  - El-Khamayel Hospital - 6th of October, Egypt (150 Bed).
  - Dar Elkutub Restoration - Bab Elkalk, Cairo Egypt.
  - National Archives Extension (Building B) - Fustat, Cairo, Egypt (10,000 m2).
  - New Cairo British Intrl School (NCBIS) Fire Protection Renovation - Egypt.
  - R3 Health Care Center (HCC) - The Capital Cairo, Egypt (2600 m2, 1.0 MVA).
  - Cleopatra Square Mall (1) - 6th October, Giza, Egypt (0.8 MVA).
  - Cleopatra Square Mall (2) GIZA (1.0 MVA).
  - Cleopatra Mall (Reflection Mall) – Sheikh Zayed City – 6th of October – Egypt (Prestigious project 2B+G+Mezz+1 – 21MVA).
  - Hacienda Bay & Hacienda White – Mediterranean North Cost (Maintenance Area, Gates, Main Gate, Cabanas, Villas, Chalets, and Lagoon).
  - Misr Culture Islamic Center, New Admin Capital, Egypt (MEP Design including Infrastructure and Building Services of Masterplan, Main Masjid, Halls and Towers).
  - National Archives Extension (Building B) - Al-Fusttat, Cairo, Egypt (MEP Design - 10,000 m2).
  - BCCIS (Canadian) School - Dubai, UAE.
  - Ambassador School - Dubai, UAE.
  - Kempinski Hotel - UAE, Dubai - 5 Stars Hotel Building.
  - The Oasis - R3 citizen service center (CSC) & Fire station - The capital Cairo, Egypt (B+G+22787 m2).
  - Kensington Crystal Tower – Dubai – UAE (Electrical Design - 2B + G + 4 Parking + 36 Offices).

- National Bank of Egypt (NBE) - Agorae Club - Giza, Egypt (10 FD - Renovation for electric power and fire alarm networks).
- South Helwan Supercritical Thermal Power Plant (3x650MW), Beni Suef, Egypt (Client: Arab Contractors, Scope: Support Arab Contractor in bidding stage by preparing electrical systems BOQs).
- Falcon (SECON) Nile Towers – Maadi – Cairo – Egypt (Electrical Design – Twin Towers 3B+G+23 “5 Stars Hotel” and 23 “Residential floors” – 10.5MVA).
- Arabian Crown Tower – Dubai – UAE (Electrical Design - 2B + G + 6 Parking + 15 Offices + 30 Residential).
- Gourmet, City Stars Branch – Cairo – Egypt (MEP Design).
- JAC Devices Factory – Badr City – Cairo (G+ Mezz., 1.5MVA).
- Villa Type 01 with basement - Palm Hills, Egypt.
- Villas Type 11, 14 & 15 - Palm Hills, Egypt.
- Villa 39 & 40 (G+1) - Cleopatra Group, Egypt.
- Medhat El-Adl Villa (G+1+Roof) - Egypt.
- Cleopatra-Elsherook Palace Villa 60-61 (G+2) - Egypt.
- Sultan Villa 207 - Palm Hills, Egypt.
- Michael Alibhai Villa - Dubai.
- KHALID MOHAMED Villa - Dubai.
- Infrastructure Projects:
  - Egypt - Japan University of Science and Technology - Burg El-Arab, Egypt (Prestigious University Campus - 200 Fadden - Design (Masterplan Infrastructure & Tunnel)).
  - Abu Dhabi Police Academy - Abu Dhabi, UAE (24 MVA Power Capacity).
- Infrastructure and Building Services Projects:
  - Landmark Compound, New Admin Capital, Egypt (MEP Design - 41 FD Built up area: 34,000 m2).
  - New Cairo Promenade, New Cairo, Egypt (Electrical Design - 33FD).
  - Vida Compound, Cairo-Alex Road, Giza, Egypt (Electrical Design - 30 FD).
  - Smash Tennis Academy Extension, Cairo Airport, Egypt (MEP Design – 1.5 MVA, Built up area: 8,000 m2).
  - Stone Residence – Egypt, New Cairo (42 MVA).
  - Stone Park - Egypt (19 MAV Power Capacity).
  - Hacienda Bay - North Coast, Egypt (450 FD-Design).
  - Jeera and Jewar Compound - 6th of October, Egypt (Electrical Design - 268,800 sq.m).
  - BCCIS (Canadian) School - Dubai, UAE (Multiple Buildings-Design).
  - Village Gardens – Kattamia – New Cairo – Egypt (Residential compound – 17MVA).
- Auditing and Value Engineering Projects:
  - Elegantry – New Cairo, Egypt (Client: HDG - Consultant: ARKAN) - Design review.
  - Cairo Capital Center – New Cairo, Egypt (Client: HDG - Consultant: ARKAN) - Design review.

- Business Plus – New Cairo, Egypt (Client: HDG - Consultant: ARKAN) - Design review.
- North Plus – New Cairo, Egypt (Client: HDG - Consultant: ARKAN) - Design review.
- Festival Living – CFC - New Cairo, Egypt (Client: Al-Futtaim Real Estate - Consultant: Al-Amar Consulting Group) - Design review.

- Field of experience :**
- 10 years experience in power plant commissioning, testing, maintenance & start-up.
  - 8 years experience in consulting and contracting companies (Continuous part time & Freelancer).
  - 1 year experience in installing and maintenance of food factories.
  - Key Qualifications:
    - Good experience in AUTOCAD, REVIT, DIALUX, ETAP, MS OFFICE, PCM, Digs, Micom Agile and ECODIAL.
    - Testing & Commissioning works for Electrical Systems including and not limited to:
      - ❖ ABB, Siemens and Micom Relays Configuration and Testing of (Lines, Transformers, Generators and motors) Protection, for Functions Like: Distance, Differential, Loss of Excitation, REF, Over-Flux, OC, EF, DOC, DEF, Voltage Restrained OC, -Ve Seq. OC, Broken Conductor, UV, OV, UF, Thermal Overload, ...) by using FREJA, ISA DSRT6 and Omicron CMC 353 and 356.
      - ❖ HV, MV & LV SWGR, Protection Panels, Local Control & Remote-Control Panels Scheme Check.
      - ❖ Stability Tests.
      - ❖ GIS SF6 test by SF6 ANALYZER.
      - ❖ GIS HV C.B and MV C.B Tests by ISA CBA 1000: (Contact Resistance test, OPEN and CLOSE Timing test).
      - ❖ CT tests by Megger, Omicron (CT ANALYZER and CPC100): (Insulation test, Turns Ratio test, Excitation (Knee point) test, Winding Resistance test & Polarity Check).
      - ❖ VT tests by Megger, Omicron CPC100: (Insulation test, Turns Ratio Test, Excitation (Knee point), Winding Resistance Test).
      - ❖ Power Transformers:
        - Electrical tests by Megger, Omicron CPC100: (Winding Insulation Resistance, Measurement of Core and Frame Insulation, Winding Resistance Test, Turns Ratio Test, Vector Group Test, Tan Delta Test & Oil Dielectric Breakdown Test.
        - Mechanical protection tests: (Buchholz relay test, Oil level test, Oil temp test, Winding temp test, Pressure relief test, Sudden pressure test).
    - Good experience in Ansaldo Energia Gas Turbine Generator 150MW Units, HRSG and steam turbine generator 325MW.
    - Good experience in Consulting and contracting companies for all types of buildings and Infrastructure Network like (Air ports, hospitals, malls, compounds, factories, villas, schools, Libraries, Residential, Commercial, Educational, Administration, High Rise Buildings, Hotels, Health Care, Banks, New Communities and Agricultural Projects and ...etc.

- Good experience in Electrical and Telecommunications systems design including power, lighting, earthing, lightning protection, elevators, telephone, data, fire alarm, sound, security, MATV, Intercom, service call and BMS.
- Good experience in Design, install and maintain the different control ways by using (classic control (relays and contactors) or the different types of PLCs and HMI or SCADA).