

Holds B. Sc. and M. Sc. in Electrical Power Engineering and has about 17 years' experience working in maintenance, construction, operation, testing, commissioning and start-up.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 15/10/1984
Gender : Male
Marital Status : Married
Residence : Maadi, Cairo

EDUCATION

- : B. Sc. in Electrical Power Engineering, Menoufia University, 2006
- : M. Sc. in Electrical Power & Machines Engineering, Cairo University
- : Studying for PhD degree of Electrical Engineering at Cairo University

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

- : Windows, MS Office (Word, Excel, etc.), Internet

TRAINING COURSES AND CERTIFICATIONS

- : Obtained an operation and maintenance course in generation power stations at SHOUBRA EL-KHEIMA POWER PLANT according to international standards of BECHTEL training program (from Jan. till Mar. 2009).
- : At PGESCO site office at Cairo West Power Station I have satisfactorily completed the SAFETY training program in the following modules:
 - Falling hazards.
 - Scaffolds.
 - Electricity.
 - Confined spaces.
 - Excavation.
 - Cranes, Lifting & Rigging.
- : Operation and maintenance course for generator (auxiliaries, protection, control and excitation) by the vendor (MITSUBISHI HEAVY INDUSTRIES, LTD & TOYOTA TSUSHO CORPORATION) (from Apr. till Jun. 2010).

- : Maintenance training for gas & oil-fired BOILER and AUXILIARIES in thermal power plant by BABCOCK-HITASHI K.K. for 30 days.
- : Operation and maintenance training of DIGITAL PROTECTION RELAY (MICOM) by the PROINELCA POWER Company.
- : Training courses operation, use and maintenance of rectifiers and inverters equipment of JEMA and batteries by JEMA vendor.
- : Operation and maintenance training of medium voltage switchgear 6.6KV, by manufacture EGEMAC.
- : Operation and maintenance training of low voltage LOAD CENTER 400V, by manufacture EMEC.
- : Operation and maintenance training of low voltage MCC 400V, by manufacture ABB.
- : Operation and maintenance training of SERVICE AND INSTRUMENTATION COMPENSATORS by the manufacture INGERSOLL RAND.
- : Operation and maintenance training of EMERGENCY DIESEL GENERATOR by the manufacture CYMASA Company.
- : Operation and maintenance training of HYDROGEN GENERATION PLANT by the SPAIRE ENERGY Company.
- : Operation and maintenance training of TRAVELING WATER SCREENS AND TRUSH RAKE installed in Cairo West Power Plant by the manufacture TRANOS FILTRATION (SPAIN).
- : Operation and maintenance training of electrical monitoring control system (EMCS) by the manufacture SCADA INNOVATIONS Company.
- : Operation and maintenance training of HEAT TRACING by the manufacture BARTEC SAFE.T Company.
- : External training (Feb./Mar. 2010): design, fabricating, assembling, testing, operation and maintenance course for large power transformer at HYOSUNG Company, Seoul, South Korea.
- : External training (Nov./Dec. 2010): design, fabricating, assembling, testing, operation and maintenance course for large power transformer 500/220KV GIS and UPS systems at HYOSUNG Company, Seoul, South Korea.
- : Visits:
 - Upper Egypt Electricity Production Company for one week:
 - High Dam Power Station (12x175MW).
 - Aswan storage-1 Power Station (7x46MW).
 - Aswan storage-2 Power Station (4x67.5MW).
 - Cairo North Power Station (two modules x 750MW).
 - NUBARIA Power Plant (3x750MW).
 - National Energy Control Center (NECC).
 - Power Transformer Factory (ALMACO).
- : External Visits:
 - Inspection for 220/6.6/6.6KV, 40 MVA transformer at TBEA Factory, Shenyang, China (Jun. 2018).
 - Nuclear Power Station (6x1000MW at KOREA HYDRO & NUCLEAR POWER Co. (KHNP), South Korea.
 - 750KV Substation (conventional, Sf6 C.B) at Kyungnam, South Korea.
 - GIS Factory (66, 220, 500 and 750KV) at Changwonn, South Korea.
- : Academic Test of English as Foreign Language (TOEFL).
- : Trainings during study:
 - Shoubra El-Kheima Power Station (generation & transmission).
 - Al-Ezz Steel Rebar's Co-operation (automatic control & PLC).
 - Cairo Regional Control Center, CRCC (Power System Control).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2016 till now
- Employer** : Cairo Electricity Production Company
- Job Description** :
- Assistant Electrical Maintenance Manager at Cairo West Power Plant 2010MW to be responsible for all preventive, time based and overall maintenance.
 - Member of the Fault analysis and RCA at the Egyptian Electricity Holding Company (EEHC) to be responsible for analysis and RCA for monthly major and emergency shutdowns for all generating units of generation companies at Egypt.
 - Responsible for evaluating and monitoring the PSS/AGC/FC systems for all generating units in Egyptian network as a daily work.
 - Member of the committee for analysis the oscillations (inter-area oscillations) for major accidents and black shutdowns especially Jordanian black shutdown at 21/5/2020 and partial shutdown at Egyptian network at 6/6/2021. Working group from EEHC, EETC/NECC, Jordon, Consultant CESI and ABB under supervisor of Head quarter of EEHC and Ministry of electricity for both Egyptian and Jordanians sides.
 - Responsible for review the High dam AVR/PSS settings configuration and testing with ABB Switzerland as a solution for increasing the participation of high dam (12 gen units) in oscillation damping.
 - Certified trainer and presenter for engineers at EEHC/CEPC training centers and for foreign visitors (Japan/JICA, Angola, Kenia and Sudan).
 - Leader of Technical working group at the Pilot projects (Generation and Distribution) for electricity market in Egypt, working group (EEHC, CEPC, NECC and JAPAN/JICA).
 - Qualified Energy trader in the online electricity shadow market from NORD POOL after attending workshops with NORD POOL/ African union for final preparation of building up the East African power pool (EAPP)/ South African Power Pool (SAPP) at Harari – Zimbabwe (two weeks) and Kigali - Rwanda (one week).
 - Leader of electrical testing team of CEPC to be responsible for testing electrical equipment, protection relays and annual working for all generating plants at CEPC.

- Dates** : From May 2007 till Jun. 2016
- Employer** : Cairo Electricity Production Company
- Project** : Cairo West Thermal Power Station 2x350MW
- Job title** : Electrical Construction, Commissioning & Start-up Engineer
- Job Description** :
- Responsible for the following:
 - The extension of ONE and HALF C.B. 500KV GIS switchyard for entering the new units (7, 8) by making the required modification for both control circuit (including protection wiring and logic modification) and GIS bus bar modification and testing.
 - Installing and testing of unit large Transformers (Main (19/500KV, 480MVA) and Aux transformers (19/6.6/6.6KV, 54MVA)).
 - Installing and testing the Isolated Phase Bus (IPB) that connects the main generator to (surge arrestor, VT, excitation transformer, unit AUX and MAIN transformer).
 - The commissioning, interfacing and interlocking between the unit

systems (main generator, 6.6KV SWGR, 500KV GIS SYRD, POWER TRANSFORMERS, turbine controller, Boiler, ...etc.).

- Dates** : For 11 months
Employer : Cairo Electricity Production Company
Project : Cairo South Power Station
Job Description : Worked as an Operation Shift Engineer in a combined cycle module (one simple gas turbine & HRSG) of 165MW, also three simple gas turbines (3x115MW), all modules GE.
- Employer** : EST/AVIC INTL Partnership (MADKOUR) (part time)
Project : IMBABA S/S 220/66/11KV GIS
Job title : Testing & Commissioning Manager
Job Description : Responsibilities including but not limited testing of power transformers (2 x 175 MVA, 4 x 40MVA, 2 x 1 MVA), 66KV GIS (17 BAYS, two BB one CB), 220KV GIS (10 BAYS, two BB one CB), 11KV switchgear (46 cells, ABB), UPS (chargers and batteries), cables (66KV, 11KV), Protection relays (transformers, feeders, bus couplers, and BB protection), BCU and SAS (configuration and start-up).
- Employer** : PEMCO Company / Doosan (part time)
Project : Shoaiba Power Plant (14x400MW Steam Turbines + 10x750MW Combined Cycle), Saudi Arabia
Job Description : Worked as Electrical Site Manager for overhauling annual maintenance of six (6) units (6x400MW) boiler.
- Employer** : [EGYPTROL](#) under supervision of GE Company (part time)
Projects : Fast Track Projects in Assiut and Damietta Power Plants
Job title : Testing, Commissioning & Start-up Engineer
Job Description :
 - Responsible for twelve (12) units of 125MW.
 - Testing, commissioning and start-up for Main and Auxiliary Power Transformers.
 - In addition to that Isolated Phase Bus Duct (IPB) and Generator Circuit Breakers (GCB).
- Employer** : AREVA (ALSTOM) Company (part time)
Project : One & half 500KV GIS site
Job title : Testing & Commissioning Engineer
- Employer** : SMART GROUP (Smart Power / Smart Solar), as sub-contractor to CHINT-Acwa Power (part time)
Project : BENBAN Solar Plant, ASWAN
Job title : Testing & Commissioning Manager
- Employer** : Hubbell / BICWITH
Projects : ERC, Mostorod
Job Description : Responsible for installing, testing and commissioning and start-up of

Automatic fast transfer system (Bicwith M-5899 System) for substations no. 1, 2 and 4.

- Field of experience :**
- Dealing with the software for different types of digital protection devices as following:
 - Power Transformer protection devices (MICOM P121, P632, P633, P634), NR PCS-978 protection relays, SIEMENS 7SJ80, GE T60.
 - 500KV GIS SYRD protection devices (MICOM P143, P632, P74), NR PCS-931 (line differential relay), NR PCS-9611 (feeder Relay), NR PCS-931 (Bus Bar Protection relay).
 - Fault Recorder ALSTOM M781, M782, have the ability for Analyzing Disturbance & Event Recorder.
 - Main generator protection device (BECKWITH M-3425A, M-3310), GE (G60, T60, C60).
 - 6.6KV SWGR protection devices (VAMP 40, 230, 135), (Schneider SEPAM 20).
 - Testing:
 - Familiar with famous testers for testing protection relays like OMICRON CMC-256, 356, Freja 300/306 and SVERKER780 / 900.
 - Familiar with modern testers for testing Power Transformers, VTs, CTs, Resistance, Dissipation, capacitance and power factor using (OMICRON CPC-100 with its complete accessories).
 - Familiar with testing CTs using OMICRON CT ANALYZER.
 - Familiar with testing Relays, Voltage Transformers and Current Transformers using (ISA T3000 substation test set), (ISA STS5000 with tan delta test module TD5000).
 - Timing for circuit breakers by (TM1600 Circuit Breaker Analyzer, ISA CBA 1000).
 - Make scheduling & planning of the work.

Published Work:

Ahmed Abdel-Rahman, Doaa K. Ibrahim, Mahmoud Gilany, "Evaluation of Protective Schemes for Grid-Connected Generator-Transformer Units in Egypt", 17th International Middle East Power System Conference (IEEE-MEPCON'15), Mansoura University, Egypt, 2015, paper code 1108.