

Holds a B. Sc. in Electrical Power & Machines Engineering and a Diploma of Electrical Switchgear and Protection. Has about 16 years hands-on experience in construction, commissioning, start-up and maintenance of several Power Plants Projects.

## PERSONAL DATA

Nationality : Egyptian  
Gender : Male  
Residence : Cairo

## EDUCATION

- : B. Sc. in Electrical Power & Machines Engineering, Zagazig University, 1994
- : Diploma of Electrical Switchgear and Protection, Ain Shams University, 1999

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

- : Windows, MS Office, Internet
- : AutoCAD
- : Computer applications PM & CM and Inventory

## TRAINING COURSES AND CERTIFICATIONS

- : Off-shore training course at ALSTOM (Mannheim - Germany & Belfort - France) for maintenance and operation of steam turbine generator, excitation system, generator protection relays, generator breaker and generator auxiliaries, 4 weeks (2006).
- : Three weeks on-site training course for GE gas turbine generator (frame 9FA), gen. protection relays (G60, T60 & C60), static starting system (LC-2100) and static excitation system (EX-2100), 2006.
- : Four weeks training course for SIEMENS GIS and its BUS & LINE protection relays, 2005.
- : One week training course for operation & maintenance of Cegelec DC & UPS systems, 2005.
- : One week training course for operation & maintenance of ALSTOM protection relays, 2004.

- : Off-shore training course at MITSUBISHI – MELCO (Japan) for maintenance and operation of gas turbine, generator, excitation, generator protection and generator auxiliaries, 4 weeks (2003).
- : Three weeks course in inspection of PT and CT at Cairo Electricity Training Center, 1998.
- : One week course in measuring DC resistance & TR turns ratio and two weeks' courses in measuring CB velocity of connecting & disconnecting and travel of circuit breaker, 1997.
- : Transformer station maintenance training for 4 weeks at Cairo Electricity Training Center, 1996.
- : 8 days course of gas insulated switchgear GIS at Cairo Electricity Training Center, 1996.
- : Site-specific training course constituting a program of concentrated study of power plant equipment, system theory and applications, 7 months (1995).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Aug. 2008 till now  
**Employer** : EGYPTROL  
**Job title** : Senior Power Plants Systems Engineer

**Dates** : From Nov. 2007 till Aug. 2008  
**Employer** : TECHINT CIMIMONTUBI  
**Project** : EI-Kureimat Combined Cycle Power Station  
 (2 Gas Turbine generator (GE), CTG 3 & 4)  
**Job title** : Senior Electrical Commissioning & Start-up Engineer  
**Job Description** : Commissioning and start-up for all auxiliary systems of the two Gas Turbine Generators:

- Two Main Transformers (300MVA) and two Aux. Transformers (32MVA, TAMINY).
- Protection relays for Transformers and Iso-Phase Bus.
- Generator breaker (ABB), Iso-Phase Bus (ALPHA Standard).
- MV Switchgear (SCHNEIDER – 2500, 4000A rating), Load centers, MCCs, DC & UPS and their protection relays.
- Motor and feeder protection relays (SEPAM M20, M40).
- Support GE for commissioning, start-up and put in service of all GE equipments.

**Dates** : From Aug. 2006 till Oct. 2007  
**Employer** : Initec Energia (Spain)  
**Project** : Cairo North Combined Cycle Power Station, Steam Turbine Generator (STG 2)  
**Job title** : Electrical Construction & Commissioning Manager  
**Job Description** : Construction, commissioning and start-up for all systems of Steam Turbine Generator:

- Main Transformer (340MVA) and Aux. Transformer (22MVA, ALSTOM AREVA).
- Iso-Phase Bus and Generator breaker (AREVA).

- Transformer protection relays (GE multilin T60, T35, MIV II, MIF IIN).
- MV Switchgear (AREVA – 2000A rating), Load centers, MCCs, DC & UPS and their protection relays.
- GE multilin motor protection relays (469, 369).

**Dates** : From May 2005 till Jul. 2006  
**Employer** : TECHINT CIMIMONTUBI  
**Project** : Cairo North Combined Cycle Power Station  
**Job title** : Senior Electrical Commissioning & Start-up Engineer  
**Job Description** : Commissioning and start-up for all auxiliary systems of the two Gas Turbine Generators:

- Two Main Transformers (300MVA) and two Aux. Transformers (32MVA), ABB.
- Transformer and Bus protection relays.
- Generator breaker (ABB), Iso-Phase Bus (ABB).
- MV Switchgear (SCHNEIDER – 2500, 4000A rating), Load centers, MCCs, DC & UPS and their protection relays.
- Motor and feeder protection relays (SEPAM M20, M40).
- Support GE for commissioning and start-up of all GE equipments.

**Dates** : From Nov. 2004 till Apr. 2005  
**Employer** : Cairo Electricity Production Company (CEPC)  
**Project** : Cairo North Combined Cycle Power Station  
**Job title** : Site Manager for Electric Construction, Commissioning & Start-up  
**Job Description** : Manage execution of construction and commissioning for all electric systems also approve site modifications for additional sub-systems:

- Review all drawings before and after construction according contract specification.
- Follow up contract execution also compare the progress with the expected time schedules for the contracts.
- Manage all site change notes with the consultant to fulfill additional site requirements.
- Review and approve all contractors' invoices according to actual contract progress.
- Check all the material after site arrival and approve the MRRs & MTRs.
- Inspect the final construction of all electric systems according to the last revision drawing.
- Manage site commissioning test procedures and test results according the specified standard (IEC & equivalents).

**Dates** : From May 2003 till Oct. 2004  
**Employer** : Cairo Electricity Production Company (CEPC)  
**Project** : Cairo North Combined Cycle Power Station  
**Job title** : Inspector Engineer  
**Job Description** : Inspector Engineer at factories according to project specification and standards (ANSI, IEC):

- 4 of 6.3KV-2000A switch boards & 4 of 400V-2000A load centers with 4 of dry type 6.3KV/400V transformers and 4 of 400V-2000A MCC switch board at ABB factory for Cairo North Power Station Project (module I).

- 2 of 6.3KV-2000A switch boards at SCHNEIDER factory for Cairo North Project (module II).
- 1.1MVA diesel generator and its control & protection circuits at AMI factory.
- 2 of 400V-2000A & 1 of 400V-4000A load centers with dry type 6.3KV/400V transformers and 2 of 400V-2000A MCC switch boards at Electro-Gorge factory.
- High, medium and low voltage power cables for Cairo North Combined Cycle Power Station Project (modules I & II) at EL SEWEDY and GIZA CABLE factories.
- 220KV switchgear protection and control cubicles at MEMCO factory.
- Cable trays at TES factory.

<b>Dates</b>	:	From Jan. 2002 till Apr. 2003
<b>Employer</b>	:	Cairo Electricity Production Company (CEPC)
<b>Project</b>	:	Cairo North Combined Cycle Power Station
<b>Job title</b>	:	Site Inspector Engineer
<b>Job Description</b>	:	<p>Site Inspector Engineer for construction and commissioning according to project specification:</p> <ul style="list-style-type: none"> <li>• Combined Cycle gas turbine generator (MITSUBISHI) with its protection and control circuits.</li> <li>• Combined Cycle gas turbine generator (GE – frame 9FA) with its protection and control circuits.</li> <li>• Static excitation system, Motor starting, MCC, DC&amp;UPS GEN. Protection (BECKWITH) systems for MITSUBISHI combined cycle gas turbine generators.</li> <li>• Static starting system LS2100, Static excitation system EX2100, MCC, DC &amp; UPS.</li> <li>• GEN. Protection (GE G60 - T60 - C60 RELAYS) for GE combined cycle gas turbine generators (250MW).</li> <li>• 220KV-3150A - 6 bays, switchgear (SEIMENS) and its protection and control circuits.</li> <li>• Medium switchgear (ABB) and their protection (REM) and control circuits.</li> <li>• Medium switchgear (SCHNEIDER) and their protection (SEPAM) and control circuits.</li> <li>• Load centers and low voltage switchgear (ABB) and their protection and control circuits.</li> <li>• Load centers and LV switchgear (GE - Electro Gorge) with its protection and control circuits.</li> <li>• P. Transformers 300, 340 MVA and 24 unit aux (HITACHI) with ALSTOM trans. protection relays.</li> <li>• P. Transformers 338, 340 MVA and 24 unit aux (ABB) with MS trans. ITALIAN Protection relays.</li> <li>• 1.1 MVA diesel generator and its interlock, control &amp; protection circuits for C.N. module I.</li> <li>• 2 MVA diesel generator and its interlock, control &amp; protection circuits for C.N. module II.</li> <li>• Earthing system, cable trays, conduits, construction power system and electric installations.</li> </ul>

**Dates** : From Sep. 2000 till Dec. 2001  
**Employer** : Cairo Electricity Production Company (CEPC)  
**Project** : Cairo North Combined Cycle Power Station  
**Job title** : Electrical Project & Contracting Engineer  
**Job Description** :

- Study and estimate bids for technical specification.
- Analysis for bidder's proposals and pre-awarding negotiations.
- Review the compliance of electric packages engineering data and drawing in accordance with of the contractual specification.
- 4x250MW Gas turbine generator contracts for modules I & II.
- 250MW Steam turbine generator contracts for modules I & II combined cycle.
- 220KV – 3150A Bus Bar – 6 Bays – one and half circuit BRK type, gas insulated switchgear with two GIL of 3150A rated contract.
- Large Power transformers rated 314MVA & 340MVA and 24MVA contract.
- 4x2000A - MV switchgear, 4x1333KVA load center and 4x2000A - LV switchgear contract.
- Balance of plant (Transformer protection relays and electric / I&C installation) contract.
- Electric (>250HP) drives & pumps contract.

**Dates** : From Apr. 1995 till Sep. 2000  
**Employer** : Cairo Electricity Production Company (CEPC)  
**Project** : Shoubra El-Kheima Power Station (1200MW)  
**Job title** : Electrical Maintenance Engineer  
**Job Description** : Maintenance Engineer for all electric systems and equipments:

- 4 of Steam turbine with Westinghouse generators (455 MVA) and its protection relays.
- 220KV - 8BAY - 2000A - ONE and HALF CB type High Voltage Gas Insulated Switchgear (TOSHIBA manufacturer).
- FUJI 6.3KV-2000A MV - switchgears with fast transfer and its protection & control.
- FUJI 400V-2000A Load centers and 400V-2000A MCC with its protection & control.
- Generator brushless excitation system with PMG and AVR with periodic inspection.
- Main & aux. Transformers (410 MVA, 32 MVA, TOSHIBA) with its control & protection.
- Medium and low voltage motors, valve motors, protection relays and control circuits.