

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 10 years hands-on experience working in operation, construction, commissioning and maintenance.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 01/01/1982
Gender : Male
Marital Status : Married
Residence : Currently KSA

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Alexandria University, 2004

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet

TRAINING COURSES AND CERTIFICATIONS

- : Generator protection functions (MICOM P343) and synchronizing panel (synchrotract5) training course in Nubaria Power Station from INITEC ENERGIA and PROINELCA POWER (1 week in Apr. 2010).
- : Instrument transformers and energy measurements (P1) training course in Cairo South Networks Training Center, Jan. 2009.
- : 9FA mechanical training course in GE facility, Belfort – FRANCE, Feb. 2009.
- : MARK VI gas turbine & generator control maintenance training course in GE facility, Belfort – FRANCE, Feb. 2009.
- : Generator control-EX2100 training course in GE facility, Belfort – FRANCE, Feb. 2009.
- : Protection for transformer training course in Nubaria Power Station from power system projects (PSP Co.), Apr. 2009.
- : DC and UPS system training course in Nubaria Power Station from power system projects (PSP Co.), May 2009.

- : Gas turbine operation and maintenance training course in Abu Qir Electrical Training Center, Dec. 2005.
- : Gas Turbine Generator Operation, Damanhour Power Station (2 weeks) in Dec. 2005.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Mar. 2012 till now
- Employer** : Saudi Engineering Group International (SEGI)
- Projects** :
 - Qurrayat Power Plant Extension II (GE frame 7A, 2x70MW) (from Nov. 2012 till now)
 - Hail Power Plant Extension III (Siemens, 4x70MW) (from Mar. till Nov. 2012)
- Job title** : Consultant Site Electrical Engineer (Electrical Inspector Engineer)
- Job Description** :
 - To insure quality as per SEC (PTS) project technical specification, engineering standard codes.
 - Preparation of MRR (Material Receiving Report), site inspection for all electrical equipments (cables, cable trays, motors, transformers, generators and accessories, protection panels, distribution panels, and all auxiliary systems related to the project).
 - Follow up Construction activities by RFI (Request for inspection) for duct banks (132KV, MV, LV, I&C), main earthing grid, cable trays, lightning system, lighting system.
 - Follow up Construction activities by RFI (Request for inspection) for all electrical equipments installed at site such as temporary construction power, 4.16KV medium voltage switchgear, 480V low voltage SWGR, MCC (motor control centers), GSU Transformer, UAT, batteries, battery chargers, DC & UPS system.
 - Check all FCN (field change notice).
 - Installation, inspections, progress monitoring, verification that such activities are progressing according to approved construction drawing (IFC), initiate corrective action to achieve quality wherever there is deviation, participate & supervise pre-commission activities, supervise the quality & progress of erection work at site, attended project progress review meeting with SEC management & contractor.
 - Issuance of punch list items for site work and follow up the contractor action.
 - Followed all safety practices and procedures and correct unsafe work practices.
 - Attending minutes of meeting (MOM) with main contractor for support to raise technical queries and clarified other problems with them.
 - Familiar with safe work permit system.
 - During Commissioning and Start-up Period: Witness for the following electrical tests:
 - GT unit online & offline checks.
 - Stability test between (Generator side & 132KV HV side, Generator side & 4.16KV MV SWGR side, 132KV cable Differential).
 - Unit overall Interlock between (Generator side, GCB side, 4.16KV MV SWGR side, 132KV HV side).
 - Change over in between incomer 1, 2, buscoupler for MV SWGR's, LV SWGR's, MCC's.

- Unit overall intertrip test between (Generator side, 4.16KV MV SWGR side, 132KV HV side, GSUT transformer protection panel, UAT transformer protection panel).
- Interlock and intertrip in between MV SWGR's and LV SWGR's.
- Acceptance and final setting test for GPP (generator protection panel) protection relays (G60A, G60B, C60, T60T, T60U).
- Acceptance and final setting for 4.16KV MV SWGR protection relays.
- Acceptance and final setting for transformer AVR panel.
- Testing & commissioning for metering panel.
- Testing & commissioning for low voltage SWGR (Unit Auxiliary SWGR, BOP SWGR, FOTP SWGR and BOP/FOTP SWGR).
- Testing & commissioning for MV SWGR (Main MV SWGR, BSDG SWGR).
- Testing & commissioning for DC & UPS system.
- Testing & commissioning for main & emergency & UPS batteries.
- Testing & commissioning for main GSUT Transformers.
- Testing & commissioning for UAT Transformers.
- Testing & commissioning for auxiliary MV/LV Transformers.
- Testing and commissioning for MV black start diesel generator (BSDG).
- Starting gas turbine (GT) by MV BSDG from dead bus, and synchronizing between BSDG & GT gas turbine.
- Testing and commissioning for 13.8KV generator circuit breaker (GCB).
- Testing and commissioning for 13.8KV isolated phase bus duct (IPBD).
- Testing & commissioning for all LV & MV motors of the unit.

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| Dates | : | From Oct. 2007 till Mar. 2012 |
| Employer | : | Middle Delta Electricity Production Company (MDEPC) |
| Project | : | Nubaria Combined Cycle Power Station (Module III) |
| Job title | : | Electrical Engineer |
| Job Description | : | <ul style="list-style-type: none"> • During Construction Period: <ul style="list-style-type: none"> - Preparation of MRR (Material Receiving Report) after site inspection for all electrical equipments (cables, cable trays, motors, transformers, generators and accessories, protection panels, distribution panels, and all auxiliary systems related to the project). - Issuance of Change Notices according to the project conditions and study of contractor change request. - Issuance of punch list items for site work and follow up the contractor action. - Factory inspection and testing for many electrical types of equipment such as low voltage cables, distribution transformers, low voltage (load center) switchgear, cable tray. - Follow up Construction activities for all electrical equipments installed in the site such as temporary construction power, grounding grid, Medium & low voltage cables, 500 KV Air Insulated Switchyard, 6.3KV Medium Voltage Switchgear, low voltage load centers, motor control centers, batteries, battery chargers, DC & UPS system, large power transformers (main & auxiliary). - Follow up Construction for two Gas Turbine Generators |

(GE-MS9001FA) and its accessories as following (motors, interconnection cables, lighting system, earthing system & Packaged Electrical/Electronic Control Compartment (PEECC) & Excitation transformer (6300/900 V) & EX2100 static excitation system 100 MM SCR WARM BACKUP & Static start isolation transformer (6300 / 2080 / 2080 V) & LS2100 load commutated inverter (LCI)).

- During Commissioning and Start-up Period: Witness for the following electrical tests:
 - Testing and commissioning of the 500KV air insulated switchyard:
 - Circuit Breakers GL317 (AREVA).
 - IVTs (voltage transformer's) type VEOS525 (trench), CVTs type CVE550 (trench).
 - CTs (Current transformer's) IOSK550 (trench).
 - Disconnecting Switches S2DAT&S2DA2T and earthing (AREVA) switch.
 - Live line insulation wash system.
 - Main Power Transformer 15.75/500KV.
 - Auxiliary power transformer 15.75/6.3/6.3KV.
 - Medium Voltage switchgear 6.3 KV (Schneider Electric).
 - LV load center 400V.
 - Electrical Generator.
 - Preparation start-up procedures for the following:
 - Preparing the energization program for 500KV Busbar.
 - Preparing the back energization program for (2x300MVA) 15.75/500KV gas turbine main transformers.
 - Preparing the back energization program for (1x340MVA) 19/500KV steam turbine main transformers.
 - Testing and commissioning for the gas turbine generator such as Megger High potential, winding resistance.
 - Testing and commissioning and start-up for the generator excitation system (EX2100), the gas turbine static starter system GE LCI (LS2100) and generator protection system (GP2100).
 - Testing and commissioning for the DC/UPS system.
 - Overall commissioning of the plant (Interfacing between the different systems such as interlocking, status signals, alarms, trip signals, and CT & VT signals).
 - Providing a fault analysis and troubleshooting procedure for many problems appeared during the start-up period such as generator protection panel VT connection, transformer protection panel and unit overall differential relay CT polarity problem, unit overall differential relay setting problem (poor selectivity) and DC earth fault problem.
 - Relays software applications skills:
 - MICOM S1 (for AREVA T&D products).
 - EnerVista (for GE MULTILIN products).
 - SFT2841 (for Schneider products).
 - In addition to test sets software.
 - Witnessed many type's of testing for all relays and devices which delivered by ALSTOM, AREVA, GE Multilin to Nubaria Power Station Module III. We have in the Protection section the Modern digital and numerical relays protection such as:
 - ALSTOM family relays (P343) for ALSTOM (STG) generators.

- Micom family relays (P741, P742 and P141) for 500KV BUSBAR, OHTL.
 - GE Multilin relays (UR family T35-T60, MIFII) for CTG main and aux. transformers.
 - GE Multilin relays (UR family G60, C60, T60) for CTG unit, GCB, unit overall differential.
 - For 6.3KV distributions, we have Sepam 1000 and Sepam 100LD (Schneider deliveries).
 - For 500KV measurements (energy meter) elster type (A1800).
 - For 500KV synchronizing (synchronizing relay) KAVS100.
 - In addition, many different types of relays for 0.4KV distributions like (MLP) motor logic plus.
- After Turnover (Maintenance):
 - Preparing and review the spare parts list required for two years of operation for all equipments.
 - Preparing maintenance programs for generators and aux. systems, main and aux. transformers, MV & LV switchgear, 500KV air insulated switchyard, and all other aux. Systems.
 - Preparing maintenance programs for gas turbine component (peecc & motors & mcc & batteries & battery chargers & lci transformer & lci compartment & excitation compartment & excitation transformer & collector brush rigging & shaft voltage rigging & PDA monitoring & all electrical panels).
 - Follow up the maintenance programs, periodic inspection for electrical equipment, analyze, and troubleshoot all faults and errors.
 - Participating in Making the Predictive Maintenance Programs and supervise it for protection systems.
 - Follow all commissioning tests of protection relays for bus bars (500KV), main and auxiliary transformers, overhead lines (500KV), 6.3KV motors and transformers.
 - Participating in Studying, Analyses, Test and Make Specification for Electrical Components in My Branch's.
 - 500KV switchyard control center.
 - 6.3KV switchgear panels.
 - All tests on power transformers, CTs, VTs, C.Bs and bus bar in 500KV, 15.75KV, 6KV and 0.4KV).

Dates : From Oct. 2005 till Oct. 2007
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Power Station (Modules I & II)
Job Description :

- Remote (monitoring and operating) the Electrical equipments of 500/220KV Control Building via PACIS System.
- Operation Engineer working in:
 - Power Transformer 16.5/500KV, 300 MVA.
 - Auxiliary Transformer 16.5/6.3/6.3KV, 32 MVA.
 - 500KV Air Insulated Switchyard (500KV AIS).
 - 220KV Air Insulated Switchyard (220KV AIS).

Dates : From Sep. 2004 till Oct. 2005
Employer : Delta Company for washers
Job Description : Maintenance Engineer for washers, dry clean.

Test equipments experience:

Dealing with many types of measuring, primary and secondary injection sets of high technologies such as:

- Secondary injection (omicron CMC256plus and omicron CMA156).
- Primary current injection (ODEN AT).
- Substation test set for CT and VT (ISA T3000).
- Digital circuit breaker analyzer (CT-6500TM).
- SF6-gas leak detector (Dilo).
- Electronic moisture measurements device SF6 (dew point, Dilo).
- Measuring device for decomposition products SF6 (Dilo).
- Battery fault locator (Megger).
- Tan delta device (doble M4100 instrument).
- Internal battery impedance (BIT).
- Earth and resistivity tester (C.A. 6470 - Megger).
- Microhmmeter tester (C.A. 6240 - Megger) and megohmmeter (C.A. 6547 - Megger).
- Winding resistance test set.
- And many another tests sets.

Accidents experience:

- In Nubaria Power Station III, 125VDC increase to 250VDC due to positive and negative earth fault lead to damage the relays and contactors.
- In Nubaria Power Station III, two current transformer 2000/1A, 500KV type IOSK550 (trench) exploded after live wash (reasons, tests for other CT's after explosion, results).
- In Nubaria Power Station III, short circuit occurred between two phases in main transformer 15.75/500KV Hyundai (Korea) (reasons, tests for transformer after SC, results).