

Holds a B. Sc. in Electrical Power Engineering and has over 17 years experience as Electrical and Protection Engineer in Combined Cycle / Thermal Generation Power Plants.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 24/10/1983
Gender : Male
Marital Status : Married
Residence : El-Behira

EDUCATION

: B. Sc. in Electrical Power Engineering, Alexandria University, 2005

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Hazard Identification & Risk Assessment (Riyadh, KSA) (Jul. 2019).
- : Work at Heights (Full Protection Program) (Riyadh, KSA) (Dec. 2018).
- : Safety Procedure for Electrical Work (Riyadh, KSA) (Dec. 2018).
- : Work Permit Certification Sender & Receiver (Riyadh, KSA) (Oct. 2018).
- : On-Load Tap-changers (Hail, KSA) (Oct. 2018).
- : Tools and techniques for continuous improvement (Riyadh, KSA) (2018).
- : First Aid (Riyadh, KSA) (Apr. 2017).
- : Basics for fire extinguishing (Riyadh, KSA) (May 2017).
- : EX2100e, LS2100e & GPP Control Class (Riyadh, KSA) (Dec. 2016).
- : Arc Flash Specialist Course (Riyadh, KSA) (Jan. 2016).
- : EX2100e Generator Excitation Class (GEMTEC Dammam, KSA) (Feb. 2015).
- : ALSTOM maintenance training program for steam turbine generator and auxiliaries (on-shore training) (Nubaria Power Station) (Apr. 2010):
 - Excitation P320 V2 - Air cooled generator 50WX23Z-109.

- Areva Micom P343 protection relay & ABB Synchrotract. 5.
- : Steam Turbine Inspection & Trouble Shooting, Steam Turbine Controller, Generator & Auxiliaries, Excitation and Protection, and Practical Training Steam Turbine Maintenance (Alstom Power Plant Training Center Mannheim, Germany) (Nov./Dec. 2009).
- : SF6 dielectric gas testing in electrical equipment (Power Plant Training Center (PPTC) - Cairo Electricity Production Company) (Feb. 2009).
- : Power transformer oil tests and determination of the technical state (Power Plant Training Center (PPTC) - Cairo Electricity Production Company) (Nov. 2008).
- : Electrical maintenance of combined cycle units (Nubaria Power Station) (Feb. 2008).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Sep. 2021 till Dec. 2022
- Project** : Khabat Power Plant (2x150MW), Erbil – Iraq:
- 2 Siemens Steam Turbines 150MW.
 - 4 Power transformer (Best) 132KV/15.75KV & 15.75KV/6.3KV.
 - 2 Medium Voltage Generator Circuit Breakers (ABB).
 - 132KV Air Insulated Switchyard (Siemens).
 - 6KV Medium Voltage Switchgears (Schneider - Hyundai).
 - Low voltage switchgear 400 V (GE).
 - DC & UPS Systems (BENNING).
 - Other Auxiliary System as WTP, FGD, HFO and ESP Systems.
- Job title** : Electrical Dept. Manager
- Job Description** :
- Testing of Electrical equipment and Protection Relay as generator protection 7UM621, Transformer protection 7UT633, over current 7SJ645 and Schneider MV SWGR SEPAM protection relays (M41, T87).
 - Testing and maintenance for power transformers including oil filtration and maintenance for two of MR OLTC Diverter Switch and repairing two of AVR TAPCON Expert 230.
 - Testing of HV, MV & LV SWGR's including current transformers, Voltage Transformers and circuit breakers.
 - Managing all engineers and Technicians at Electrical Department.
 - Daily Site supporting for team members during Preventive Maintenance and troubleshooting activities.
 - Reviewing the work order which received from Operation Team and supporting the concerning team to normalize the system and giving the feedback to operation Team.
 - Reviewing and improving the Plan for Electrical Maintenance and Testing during normal operation and Shutdown of Units.
 - Following the execution of Maintenance Plan by the team members.
 - Preparing the Daily activity progress report during Normal operation and unit Shut down and submitting to Engineering Department.
 - Preparing the list and requesting the required spare parts.
 - Performing training for Team members to improve their abilities.
 - Reviewing the risk assessment for electrical critical activities.
 - Reviewing and improving the check lists and Maintenance Procedures for maintenance and testing for Electrical and protection systems.

- Preparing RCA reports for troubleshooting activities.

Dates : From Mar. 2020 till Sep. 2021
Employer : Middle Delta Electricity Production Company
Project : Nubaria Power Plant (2250MW Combined Cycle)
Job title : Electrical & Protection Engineer
Job Description :

- Following the commissioning activities and handover process for gas turbines and steam turbines and remaining auxiliary systems at the plant.
- Testing of Transformers and bus Multifunction Protection Relays such as T60, T35, C60.
- Testing of generators Multifunction Protection Relay such as G60, MICOM P343.
- Testing of MV switchgear Schneider protection relays SEPAM (S20, S40 and M41).
- Testing and maintenance of the 500 KV air insulated switchyard including circuit breakers, Current & Voltage Transformers.
- Reviewing the As-built drawing for electrical and protection systems during power plant handover.
- Preparing maintenance plan and checklists of Generators, Transformers, MV & LV switchgear, and others plant auxiliary systems.
- Leading the electrical technician team during preventive and corrective maintenance activities.
- Troubleshooting and solving any faults regarding power plant electrical and protection Systems.
- Preparing the list of required electrical spare parts for gas turbines, steam turbines and auxiliary systems.
- Following up on the overhauls of both of gas turbine and steam turbines generators and their auxiliary systems and carrying out the required maintenance, inspection and testing.

Dates : From Feb. 2014 till Feb. 2020
Employer : Saudi Electricity Company
Project : PP12 CCPP (2080MW) - KSA:

- 8 GE gas turbines 170MW Frame FA.05 (Excitation System EX2100e, Starting Systems LCI LS2100).
- 2 Alstom Steam turbines 340MW.
- 6 on-load power transformer (Hitachi) 380KV/18KV/18KV & 380KV/21KV.
- 4 on-load power transformer (Emco) 18KV/13.8KV/6.9KV.
- 14 Medium voltage Generator Circuit Breakers (ABB).
- 84 MV/LV Auxiliary Transformers different ratings.
- 13.8KV Medium Voltage Switchgear (Hyundai).
- 480V Low Voltage Switchgears and MCC's from different manufactures as example (GEDAC, GE, ABB, Siemens, Allen Bradley).
- DC & UPS Systems from (CEG) manufacture.

Job title : Senior Electrical & Protection Engineer

- Job Description** :
- Following the commissioning activities and handover process for gas turbines and steam turbines and remaining auxiliary systems at the power plant.
 - Electrical Team Lead and providing support for Testing and maintenance of electrical systems.
 - Testing of Electrical and Protection Systems including Generators, transformers, Circuit Breakers, MV SWGR and LV SWGR protection digital relays as G60, T60, C60, MICOM P345, MICOM P633, P121, P122 and MIVII.
 - Reviewing the Red-Marked up drawing for electrical and protection systems during power plant handover.
 - Preparing, coding and requesting of all required electrical spare parts for Gas turbine steam turbine and auxiliary systems.
 - Arc Flash Specialist for PP12 and responsible for performing all circuit breakers calculations and performing training courses for Arc Flash.
 - Member of COA Transformer Specialist Engineering Group.
 - Troubleshooting of any electrical problem for excitation EX2100e, LCI 2100 and protection systems.
 - Preparing Function Location for Electrical Equipment for SAP System.
 - Preparing maintenance programs for generators, main transformers, aux. transformers, MV & LV switchgear, and all other aux. Systems.
 - Following up the performing of maintenance programs, periodic inspection for electrical equipment, analyzes, and troubleshoots all faults and errors.
 - Preparation of troubleshooting reports and RCA reports to manager for all electrical issues during commissioning and maintenance stages.
 - Following up the overhauls of both of gas turbine generators and their auxiliary systems and carrying out the required maintenance, inspection and testing.
 - Preparing training courses materials and providing training for O&M Team for electrical and protection systems and arc flash protection.

Dates : From May 2006 till Feb. 2014

Employer : Middle Delta Electricity Production Company

Project : Nubaria Power Plant (2250MW Combined Cycle):

- 2 GE gas turbines 250MW Frame MS9001FA (Excitation System EX2100, Starting Systems LCI LS2100).
- 4 Siemens gas turbines 250MW Model 94.3A2 (Starting System SFC, Excitation system SEE).
- 1 Alstom steam turbine 250MW (Excitation system P320 V2).
- 2 Mitsubishi steam turbines 250MW.
- 10 Power transformer (ZTR) 500KV/16.5KV & 500KV/15KV & 16.5KV/6.3KV.
- 5 Power transformer (Hyundai) 500KV/15.75KV & 500KV/19KV & 15.75KV/6.3KV.
- 9 Medium voltage Generator Circuit Breakers (ABB).
- 500KV Air Insulated Switchyard (Areva).
- 220KV Air Insulated Switchyard (ABB).
- 6.3KV Medium Voltage Switchgear (Schneider).
- 400 V Low voltage switchgear (Schneider).

- Job title** : Electrical & Protection Engineer
- Job Description** :
- Following the commissioning activities and handover process for gas turbines and steam turbines and remaining auxiliary systems at the plant.
 - Testing of Transformers and bus Multifunction Protection Relays such as T60, T35, C60.
 - Testing of generators Multifunction Protection Relay such as G60, MICOM P343.
 - Testing of MV switchgear Schneider protection relays SEPAM (S20, S40 and M41).
 - Testing and maintenance of the 500 KV air insulated switchyard including circuit breakers, Current & Voltage Transformers.
 - Reviewing the As-built drawing for electrical and protection systems during power plant handover.
 - Preparing maintenance plan and checklists of Generators, Transformers, MV & LV switchgear, and others plant auxiliary systems.
 - Leading the electrical technician team during preventive and corrective maintenance activities.
 - Troubleshooting and solving any faults regarding power plant electrical and protection Systems.
 - Preparing the list of required electrical spare parts for gas turbines, steam turbines and auxiliary systems.
 - Following up on the overhauls of both of gas turbine and steam turbines generators and their auxiliary systems and carrying out the required maintenance, inspection and testing.
- Field of experience** :
- More than 17 years experience as Electrical and Protection Engineer in Combined Cycle / Thermal Generation Power Plants:
 - Nubaria Power Plant (2250MW) - MDEPC - Egypt (May 2006 – Feb. 2014 & Mar. 2020 – Sep. 2021).
 - PP12 CCPP (2080MW) - SEC - KSA (Feb. 2014 – Feb. 2020).
 - Khabat Power Plant (2x150MW), Erbil – Iraq (Sep. 2021 – Dec. 2022).
 - Testing of electrical and protection systems during commissioning stage as well as during the maintenance stage.
 - Testing of multifunction protection relays for Generators, Transformers, and Switchgears and familiar with different type of protection software as GE Enervista, Siemens DIGSI 4, Schneider SFT2841 and S1 Studio.
 - Familiar with Primary and Secondary injection devices as Omicron CMC 256+, CMC 356, CPC 100, CT Analyzer, and FREJA 546.
 - Reviewing the electrical and protection drawing during power plant handover.
 - Performing Preventive and corrective maintenance for Electrical Systems for Gas Turbines and Steam Turbines from different manufactures as example Siemens, GE, Alstom and Mitsubishi.
 - Troubleshooting for electrical problems in the power plants regarding Protection, Excitation and starting systems.
 - Testing and maintenance for power transformers from different manufactures as example Hyundai, Alstom, Hitachi, EMCO, ZTR, Best.
 - Testing and maintenance for HV, MV & LV Switchgears and circuit breakers from different manufactures as example AREVA, Hyundai,

Schneider, GE, Siemens, ABB, GEDAC, and Allen Bradley.

- Skills:
 - Ability of studying and understanding any electrical drawings.
 - Familiar with many types of Electrical software's and fast understanding and using any new software.
 - Performing Short Circuit and Arc Flash Study and calculations.
 - Leadership Skills.
 - Teamwork Skills.
 - Electrical troubleshooting skills.
 - RCA Preparation skills.
 - Risk assessment skills.
 - Communication skills.
 - Scheme studying and troubleshooting.
 - Preventive and corrective Maintenance planning.