104786-ELE-1MPTyz-E-2004

Senior Electrical & Protection Engineer

Holds a B. Sc. in Electrical Power Engineering and has about 19 years' experience working in maintenance and protection.

PERSONAL DATA

Nationality : Egyptian Birth Date : 06/10/1982

Gender : Male
Marital Status : Married
Residence : Menoufia

EDUCATION

B. Sc. in Electrical Power Engineering, Menoufia University, 2004

LANGUAGES

Arabic : Native Language

English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

: AutoCAD, ETAP

TRAINING COURSES AND CERTIFICATIONS

- : General background for electrical maintenance of gas turbine generator and accessories, power transformers, M.V switchgear, MCC, DC and UPS system, Nubaria Power Station I & II (Jan./Feb. 2006).
- : Maintenance Training Program for Combustion Turbine Generator & Auxiliaries (offshore training: Belfort France) (Feb. 2009):
 - Part 1: MS9001FA gas turbine maintenance & Generator maintenance.
 - Part 2: Mark VI turbine control system fundamentals and Toolbox software.
 - Part 3: Generator control and protection (EX2100 excitation system, LS2100 static starter system, GP2100 generator protection panel).
- : ALSTOM maintenance training program for steam turbine generator and auxiliaries (on-shore training: Nubaria site) (from Mar. till May 2010):
 - Excitation P320 V2.
 - Air cooled generator 50WX23Z-109.
 - P320 GTC V2+ Steam Turbine Control System.
 - ALSTOM CM condenser.
 - Areva Micom P343 protection relay & ABB synchrotact.5 synchronizing device.

- BTG Valve & Smartrak maintenance & calibration.
- Condenser exhauster vacuum pump unit & water box priming units.

Erection, operation and maintenance of solar treatment plant training, INITEC Energia / CHEMTROL - Nubaria Power Station III site (Sep. 2009).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Dec. 2013 till now

Employer : Middle Delta Electricity Production Company (MDEPC)

Project : Nubaria Power Station III (2250MW Combined Cycle Project)

Job title : Senior Electrical & Protection Engineer

Job Description : • Carrying out and supervise all preventive, Predictive, corrective

maintenance.

Make the fault analysis and prepare the fault analysis report.

- Preparing and reviewing the maintenance programs for the electrical.
- Preparing equipment database, method of statement & job plans for plant computerized maintenance management system (MAXIMO).
- Providing maintenance feedback through (MAXIMO) with all required failure reports and documentations.
- Studying and preparing the required spare parts Lists for the electrical systems with reference to the contract specification and the contractor recommendation.
- Perform walk down for plant different electrical systems and prepare the related punch list.
- Following up warranty items with vendors.
- Coordinate with other departments (mechanical & instrumentation) in common problems.
- EHS Environment health and safety training.
- Major Package:
 - Attending two times gas turbine combustion inspection for six units (CI).
 - Witness for dismantling three gas turbine generators (250MW).
 - Witness for the following electrical tests for gas turbine generator:
 - Electrical Generator (250MW):
 - Stator windings Hipot test.
 - Stator winding insulation resistance & polarization index measurements.
 - Stator DC winding resistance measurement.
 - Rotor insulation resistance & polarization index measurement.
 - Rotor DC winding resistance measurement.
 - Rotor winding AC impedance measurement.
 - Core Ring test (loop test).
 - Auxiliary power transformer:
 - Insulation Resistance & polarization index measurement.
 - DC winding Resistance measurements at each tap.
 - Oil dielectric strength test.

Dates : From Mar. 2012 till Dec. 2013

Employer: General Electric (GE Power and Water) Company

Project Subiya Power Station (3x750MW Combined Cycle)

Job title Senior Electrical & Protection Engineer

Carrying out and supervise all preventive, Predictive, corrective **Job Description** maintenance.

Make the fault analysis and prepare the fault analysis report.

- Preparing and reviewing the maintenance programs for the electrical.
- Preparing equipment database, method of statement & job plans for plant computerized maintenance management system (MAXIMO).
- Providing maintenance feedback through (MAXIMO) with all required failure reports and documentations.
- Studying and preparing the required spare parts Lists for the electrical systems with reference to the contract specification and the contractor recommendation.
- Perform walk down for plant different electrical systems and prepare the related punch list.
- Following up warranty items with vendors.
- Coordinate with other departments (mechanical & instrumentation) in common problems.
- EHS Environment health and safety training.
- Major Package:
 - Attending tow times gas turbine combustion inspection for six units
 - Witness for dismantling three gas turbine generators (250MW).
 - Witness for the following electrical tests for gas turbine generator:
 - Electrical Generator (250MW):
 - Stator windings Hipot test.
 - Stator winding insulation resistance & polarization index measurements.
 - Stator DC winding resistance measurement.
 - Rotor insulation resistance & polarization index measurement.
 - Rotor DC winding resistance measurement.
 - Rotor winding AC impedance measurement.
 - Core Ring test (loop test).
 - Auxiliary power transformer:
 - Insulation Resistance & polarization index measurement.
 - DC winding Resistance measurements at each tap. 0
 - Oil dielectric strength test.

From Oct. 2007 till Mar. 2012 **Dates**

Employer Middle Delta Electricity Production Company (MDEPC)

Project Nubaria Power Station III (1x750MW Combined Cycle Project)

Job title Electrical Engineer

During Construction Period: Job Description

- 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 equipments such as medium and low voltage cables, 500KV bare conductors, distribution transformers, medium and low voltage switchgear, motor control centers, protection panels, Isolated phase bus duct (IPB), AC and DC distribution panels.
- Follow up Construction activities for all electrical equipments installed in the site such as temporary construction power, grounding grid, Medium & low voltage cables, 500KV 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).

During Commissioning and Start-up Period:

- Testing and commissioning of the 500KV Areva air insulated switchyard circuit breakers, CTs, VTs, and disconnecting switches (Megger, DC resistance, contact resistance, timing, insulation power factor tanδ interlocking and control circuit).
- Testing of the main & aux. power transformers Hyundai (Megger, DC resistance, turns ratio, tanδ).
- Testing and commissioning for Schneider 6.3KV switchgear, SEPAM protection relay, 6.3 to 0.4KV dry type transformers, 400 V load centers, MCC.
- Emergency diesel generator (Electra Molins).
- Testing and commissioning for the GE gas turbine generator such as Megger High potential, winding resistance.
- Testing and commissioning and start-up for the generator excitation system (EX2100), gas turbine static starter system GE LCI (LS2100) and generator protection system GE multilin relays (GP2100).
- Testing and commissioning for the Alstom steam turbine Air cooled generator 50WX23Z and its accessories as following (static excitation system P320 V2 WARM BACKUP, Excitation transformer, P320 GTC V2+ Steam Turbine Control System, ALSTOM CM condenser, Areva Micom P343 protection relay & ABB synchrotact.5 synchronizing device, BTG Valve, Condenser exhausted vacuum pump unit & water box priming units.
- Testing and commissioning for the Benning DC/UPS system.
- Overall commissioning of the plant (Interfacing between the different systems).

• 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.
- Follow up the maintenance programs, periodic inspection for electrical equipment, analyze and troubleshoot all faults and errors.
- Monitor the status of material & spare parts to specify the required parts.

Dates : From Jun. 2005 till Oct. 2007

Employer: West Delta Electricity Production Company (WDEPC)

Project : Nubaria Power Station I & II (2x750MW Combined Cycle Project)

Job title : Electrical Maintenance Engineer

Job Description : • Follow up Construction for four Gas Turbines Generator (Siemens)

250MW type V94.3A and its accessories as following (motors, interconnection cables, lighting system, earthing system, PCC, SFC and

excitation system).

• Testing and commissioning of the 500KV air insulated switchyard circuit breakers, CTs, VTs, and disconnecting switches (Megger, DC resistance, contact resistance, timing, insulation power factor tanδ interlocking and control circuit).

• Testing of the main & aux. power transformers (Megger, DC resistance, turns ratio, $tan\delta$).

 Testing and commissioning for 6.3KV switchgear, SEPAM protection relay, 6.3 to 0.4KV dry type transformers, 400 V load centers, MCC, and emergency diesel generator.

 Testing and commissioning for the gas turbine generator such as Megger High potential, winding resistance.

Field of experience:

- Reading and reviewing electrical and protection drawing.
- Troubleshooting for electrical faults for all electrical equipment.
- Performing Preventive and corrective maintenance for Electrical Systems (GE Gas Turbines, Steam Turbines and Alstom Steam Turbines).
- Familiar with different type of protection relays software as GE Enervista, Siemens DIGSI 4 and Micom S1 Studio.
- Testing and commissioning for multifunction protection relays for Generators, Transformers and Switchgears.
- Familiar with Primary and Secondary injection devices as Omicron CMC 256 plus, CPC 100 and CT Analyzer.