

101581-ELE-MOS-E-2005

Senior Operation & Maintenance Engineer

Holds B. Sc. in Electrical Power, Measurements & Control Engineering and M. Sc. in Electrical Power & Machines Engineering. Has about 16 years hands-on experience working in maintenance, operation, commissioning and start-up.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 29/08/1981
Gender : Male
Marital Status : Married
Residence : Giza, Cairo

EDUCATION

- : B. Sc. in Electrical Power, Measurements & Control Engineering, Benha University, 2005
- : M. Sc. in Electrical Power & Machines Engineering, Cairo University, 2012
- : Studying for PhD in Electrical Power & Machines Engineering, Ain Shams University, from 2013 till now
- : Need Al-Dhalea Secondary School, Fifa, Jazan, Saudi Arabia, 1999

LANGUAGES

Arabic : Native Language
English : Excellent

COMPUTER SKILLS

- : Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Training course in operation of power plant using DCS CentumVP, Yokogawa Middle East and Africa Company, Muharraq, Bahrain (Jul. 2014).
- : Training course in construction, operation and maintenance of 245-KV GIS, Hyundai Heavy Industries Company Ltd, Ulsan, South Korea (Apr. 2013).
- : Training course in Protection Devices for Service Engineers, Siemens Power Academy TD, Nuremberg, Germany (Mar. 2013).
- : Training course in maintenance and operation of combined cycle power plant, Siemens Company (Jan. 2017 – Mar. 2017), Cairo, Egypt.
- : Training course in Ansaldo Caladie Company in Heat Recovery Steam Generator Operation and Maintenance, Benha Power Station, Benha, Egypt (Dec. 2014).

- : Training course in Siemens Power Generation Company jobsite training in Protection Device for Service Engineer, Benha Power Station, Benha, Egypt (Nov. 2013).
- : Training course in Hyundai Heavy Industries Company jobsite training in maintenance of 245KV GIS, Benha Power Station, Benha, Egypt (Jun. 2013).
- : Training course in General Electric Company jobsite training in EX2100e Generator Control Maintenance, Benha Power Station, Benha, Egypt (May/Jun. 2013).
- : Training course in Hyundai Heavy Industries Company jobsite training in testing and operation of 245KV GIS, Benha Power Station, Benha, Egypt (Apr./May 2013).
- : Training course in English Language advanced level in written, speaking and reading, Middle Delta Electricity Production Company, Mansoura, Egypt, (May/Jun. 2012).
- : Training course in operation simulation of 250MW Gas Turbine Unit, Middle Delta Electricity Production Company, Mansoura, Egypt (Nov. 2011).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Aug. 2011 till Nov. 2020
- Employer** : Middle Delta Electricity Production Company
- Job title** : Senior Operation & Maintenance Engineer
- Job Description** :
- Commissioning and Start-up of the following projects:
 - Banha Combined Cycle Power Plant 750MW, Benha, Egypt.
 - Benha 245KV Gas Insulated Switchgear GIS Substation, Benha, Egypt.
 - New Capital Combined Cycle Power Plant 4800MW, Cairo. Egypt.
 - Commissioning, start-up, trouble shooting and control the operation of the combined cycle power station using DCS system as the following:
 - Two 250MW gas turbine units and one 250MW steam turbine unit.
 - 245KV Gas Insulated Switchgear System GIS.
 - 6.3KV Medium Voltage Switchgear.
 - Protection Devices System: Over Current, Differential, Distance and Bus Bar protection system.
 - AC Motor: 6.3KV and 380 V.
 - DC Emergency Motor: 220 V.
 - Pulse, Instrumentation and Service Air Compressors.
 - MCC Panels.
 - UPS System.

- Dates** : From Jun. 2008 till Jun. 2011
- Employer** : Sino Tharwa Drilling Company, Cairo
- Job title** : Electrical Engineer
- Job Description** :
- Maintenance and operation of electrical system of 1500HP drilling Rig as the following:
 - Generators: CAT3512B, 600V, 1800KVA and CAT3406B, 380V, 365KVA.
 - VFD: Variable Frequency Drive and SCR: Silicon Controlled Rectifier.
 - Flammable and H2S sensors.

- Kitchen and Laundry Equipment.
- Air Conditioning and Refrigerator.
- Top Drive: TESCO ECI 900 and VARCO TDS11-SA.
- AC Motors: 600V and 380V.
- DC Motors: 600V.
- MCC Panels.
- UPS System.

Dates : From Aug. 2005 till Jun. 2008

Employer : InterContinental Resort, Marsa Alam, Red Sea

Job title : Electrical Engineer

Job Description :

- Represent the company in the external dealings with other organizations and authority.
- Ensure the electrical power supply for the company building by the main incoming feeder or by the 180 KVA emergency generator.
- Design, Installation and maintenance of the power distribution networks, illumination and fire alarm system for the company building.
- Maintenance the small size housing air conditioning.
- Maintenance of kitchen equipments.
- Maintenance, troubleshooting and operation of UPS System.
- Maintenance of MCC panels.

Academic Experiences:

- Faculty of Engineering, Ain Shams University, Cairo, Greater Cairo, Egypt:
 - Job Title: PhD Candidate.
 - Period: 18 February 2013 till now.
 - Job Details: Preparing a scientific project concerns with nuclear energy issues associated with electrical power system as the following:
 - ❖ Hired as PhD candidate on 18 February 2013.
 - ❖ The qualified exam was passed on 11 March 2013.
 - ❖ Four courses of the six PhD courses were finished in July 2013.
 - ❖ The remaining two courses were finished in February 2014.
 - ❖ The proposed PhD thesis was officially planned on 11 April 2016, after signing of the contract to establish El-Dhabaa Nuclear Power Plant 4800MW on 19 November 2015.
 - PhD Thesis Title: "Impact of Nuclear Power Plants on the Egyptian Grid Performance".
 - Published Papers: there are many published papers in several international journal and conference related to the proposed PhD thesis. These papers can be mentioned as the following:
 - ❖ "The role of Nuclear Energy in the Future of Energy System in Egypt", The 19th Middle East Power System International Conference MEPCON 2017, 19-21 December 2017, Cairo, Egypt.
 - ❖ "Analysis of Nuclear Safety Measures Associated with Nuclear Power Plants Programs", The 11th International Conference on Electrical Engineering ICEENG 2018, 3-5 April 2018, Military Technical College, Cairo, Egypt.

- ❖ “Improvement of Power System Harmonics Level Generated from the Electric Arc Furnaces EAF to the Acceptable Level by using Shunt Passive Filters”, The International Council on Large Electric Systems Conference CIGRE 2018, 27-31 August 2018, Paris, France.
- ❖ “Mitigation of Power System Harmonics Generated from the Generator Excitation in Nuclear Power Plants by Using Shunt Passive Tuned Fitters”, The International Council on Large Electric Systems Conference CIGRE-Egypt 2019, 6-8 March 2019, Cairo, Egypt.
- ❖ “Economic and Environmental Issues Associated with Deployment of Nuclear Energy Generation”, Journal of electrical engineering www.jee.ro, Romania, volume 19/2019, edition 4, particle 19.4.16, authors: myself.
- Faculty of Engineering, Cairo University, Giza, Greater Cairo, Egypt:
 - Job Title: M.Sc. Student.
 - Period: 1 October 2005 to 13 January 2013.
 - Job Details: Preparing a scientific research concerns with issues of energy generation, utilization and Economics as the following:
 - ❖ Joined as M.Sc. student on 1 October 2005.
 - ❖ Finished M. Sc. required courses in September 2006.
 - ❖ The Submitted M.Sc. thesis was officially planned on 23 October 2007.
 - M.Sc. Thesis Title: “Improvement of Power System Harmonics Resulted from Using the DC-Converter Loads and Electric Arc Furnaces in the Distribution Networks”.
 - Published Paper: The published paper details are shown as following: “Improvement of Power System Distribution Quality Due to Using DC- Converter Loads and Electric Arc Furnaces, New York Science Journal 2011:4 (12), USA, www.sciencepub.net/new.