#### **103066-ELE-12MOPST-E-2008** Protection, Testing, Commissioning & Troubleshooting Engineer

Holds a B. Sc. and a Diploma in Electrical Power Engineering and has about 15 years' experience working in operation, commissioning, start-up, protection, testing and troubleshooting.

# PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	10/10/1984
Gender	:	Male
Marital Status	:	Married
Residence	:	Alexandria

## EDUCATION

- : B. Sc. in Electrical Power Engineering, Al-Azhar University, 2008
- : Diploma in Electrical Power Engineering, Menoufia University, 2016

## LANGUAGES

Arabic	:	Native Language
English	:	Very Good
German	:	Basics

#### **COMPUTER SKILLS**

- : Windows, MS Office, Internet
- : Maximo, PLC

# TRAINING COURSES AND CERTIFICATIONS

- : Operation of gas turbine, Mitsubishi Heavy Industrial, EI-Atf site, Egypt.
- : Operation of steam turbine, Ansaldo Energia, El-Atf site, Egypt.
- : HRSG operation and maintenance.
- : HRSG controls and instrumentation.
- : HRSG water chemistry and safety, NEM B.U. industrial & utility boilers, course in EI-Atf site, Egypt.
- : CENTUM CS 3000 R3 Fundamentals for operation, Yokogawa Middle East, El-Atf site, Egypt.
- : Maintenance and operation of horizontal pumps & sump pump, Toshiba, El-Atf site, Egypt.
- : PLC Advanced course (Sep./Oct. 2008).
- : ICDL

# CHRONOLOGICAL EXPERIENCE RECORD

Dates	: From 2018 till now
Employer	: Egyptian Electricity Transmission Co. (EETC)
Job title	: Protection, Testing, Commissioning & Troubleshooting Engineer
Job Description	<ul> <li>Testing &amp; programming various types of protection relays.</li> </ul>
	Faults analysis & preparing incident Reports.
	<ul> <li>Adequate knowledge in reading the schematic drawings of different protection schemes for 220/66/11KV systems.</li> </ul>
	<ul> <li>Responsible for New extensions &amp; installations at live Substations:         <ul> <li>High voltage test, Contact resistance, function check, interlocks, Timing for C.B.</li> </ul> </li> </ul>
	<ul> <li>Complete testing for all types of C.Ts and V.Ts.</li> <li>LV, MV, HV convention and GIS switchgear "C.T, V.T, isolators and</li> </ul>
	C.B".
	<ul> <li>Scheme checks (Synchronizing, breaker fail, Bus bar protection, communication scheme for distance relays, Interlocks.</li> </ul>
	<ul> <li>Substation main and back up protection different manufacturers (i.e. Siemens, ABB, Areva, GE, Schneider and SEL).</li> </ul>
	<ul> <li>Primary injection, overall stability for bus bar, REF, step up/down transformer.</li> </ul>
	Live H.V Substations:
	<ul> <li>Making routine program on these substations and complete testing protection relay.</li> </ul>
	<ul> <li>Faults analysis &amp; preparing incident Reports.</li> </ul>
	<ul> <li>Work on most Tester equipment like Omicron CMC 356, SVERKER 780, CPC-100, ODEN primary injection current.</li> </ul>
	<ul> <li>Excellent knowledge in protection software applications (DIGSI 4.93, MICOM AGIL, GE Software, PCM 2.6, Cap501, Cap540, SFT2841).</li> <li>Protection Relays.</li> </ul>
	<ul> <li>Protection Relays.</li> <li>Received complete substation from pre-commissioning to start-up.</li> </ul>
	<ul> <li>Dc distribution systems and battery chargers.</li> </ul>
Dates	: From 2016 till 2018
Employer	: GE
Project	: Besmaya Power Plant (4500MW), Iraq
	(O&M of Combined Cycle Power Plant with GE Gas Turbine 9FA, Steam Turbine C7)
Job title	: Operation Engineer (Field Operator)
Job Description	: • To supervise and oversee daily plant operations and maintenance
	performed by Operations team whilst on shift in order to ensure that
	operational targets are achieved safely, commercially and within the strict environmental and contractual limits.
	<ul> <li>Direct the operating crew to safely operate a power plant and associated</li> </ul>
	equipment in accordance with established procedures and practices.
	Troubleshoot operational problems and initiate maintenance requests.
	<ul> <li>Ensure the plant and associated equipment is operated in compliance with applicable regulations.</li> </ul>
	<ul> <li>Exercise sound judgment and take timely actions as needed to ensure</li> </ul>
	personnel safety, to remain in compliance with regulations and to

	<ul> <li>prevent equipment damage.</li> <li>Assess risks posed by identified problems and ensure management and other plant personnel are made aware of those risks.</li> <li>Development of short- and long-term operation strategy for the plant and the development of a capable shift engineer and operator team to support that strategy.</li> <li>Day to day plant operation, safely and efficiently, according to good utility practice, dispatch instructions, the company rules and procedures.</li> <li>Ensure that plant meets safety, availability, reliability, efficiency, generation and budget targets.</li> </ul>
Dates	: From 2014 till 2016
Employer	: West Delta Electricity Production Co.
Project	<ul> <li>New Abu Qir Thermal Power Plant units 6 &amp; 7 (2x650MW) (Steam Turbine ANSALDO (TC4F30))</li> </ul>
Job title	: Operation Engineer (DCS & Field)
Job Description	<ul> <li>Start-up and shut-down procedures for Thermal Power Plant 2x650MW (Cold, Warm, and Hot Start-up and normal or emergency shut-down).</li> <li>Turbine &amp; auxiliaries' operation (Mitsubishi &amp; ztpc). And reporting the equipment condition during normal operation, DCS operation using DIASYS.</li> <li>Boiler &amp; auxiliaries' operation (Ansaldo Caldaie &amp; ztpc) and reporting the equipment condition during normal operation, DCS operation using (ABB -800Xa).</li> <li>Supervision of plant auxiliaries and Conducting all preparation steps of units in field to realize permissive for start-up from control room such as (filling line of water free of bubbles, all safety valves ready, coolers in service, all electrical power source ready position of motorized valves in auto mode and ready to work locally, all manuals valves before and after control and motorized valves shall be open, etc.</li> <li>Attending and observing All Commissioning Tests with All Contractors (Make flushing, Steam blowing, Heat and Run tests, chemical cleaning for different systems, make energized for different electrical systems, Load rejection test, Run back test, Performance and reliability test).</li> <li>Supervision of plant auxiliaries.</li> <li>Analysis and troubleshooting of operation problems.</li> <li>Making connection and disconnection for electrical circuits of 500KV, 6.6KV, 380V and operation of electrical diesel-generators.</li> <li>GIS Operation Engineer (500KV).</li> <li>Firefighting system.</li> <li>Closed cooling water system.</li> <li>Operation H2 production plant.</li> <li>Operation Desalination water production plant.</li> </ul>
Dates	: From 2010 till 2014
Employer Broject	: West Delta Electricity Production Company
Project	: EI-Atf 750MW Combined Cycle
Job title	: Operation Engineer (DCS & Field)
Job Description	<ul> <li>Commissioning, start-up and operation for Gas Turbine Mitsubishi (2x250MW) and Steam turbine ANSALDO (250MW). Perform the</li> </ul>

sequence test for the following systems (CP-118):

- Condensate system & condensate pumps.
- Feed water system (LP, HP/IP) & FWP's.
- Circulating water system & CW pumps.
- Service water system.
- Closed cooling system.
- Instrument and service air system.
- Potable water system.
- FOR NEM HRSG boilers:
  - Perform cleaning activity according to procedures for condensate and feed water systems.
  - Perform the blow out activities for HP steam, HRH & CRH steam, LP steam lines.
- Worked as Owner Operation Engineer, responsible for:
  - Conducting all preparation steps of units in field to realize permissive for start-up from control room such as (filling line of water free of bubbles, all safety valves ready, coolers in service, all electrical power source ready position of motorized valves in auto mode and ready to work locally, all manuals valves before and after control and motorized valves shall be open, etc.
  - Record the commissioning data for all systems mentioned previously.
  - Report and advise the daily activities for all systems mentioned previously.

Dates Employer Project Job title Job Description	: :	<ul> <li>From 2008 till 2010</li> <li><u>EGYPTROL</u> (sub-contract to TOSHIBA)</li> <li>El-Atf Power Plant (750MW)</li> <li>Electrical Engineer (worked as Commissioning, Start-up &amp; Maintenance Engineer of the electrical systems)</li> <li>Power plant main transformer 340 MVA-220/15.75KV.</li> <li>Power plant unit auxiliary transformer 34 MVA-21/6.3KV.</li> <li>Local control panels.</li> <li>Commissioning and start-up for 380 &amp; 6000V motors.</li> </ul>
Field of experience	:	<ul> <li>Major projects of power plant have included installation for gas turbine, steam turbine, boilers and related auxiliaries. All aspects of commissioning, start-up and operation for all Electrical equipments to be according client contract specification and manufacture requirement. Understanding of P&amp;ID drawing and pipe line installation commissioning, under &amp; above Ground piping, pumps and valves.</li> <li>Technical ability in the field and in the office.</li> <li>Adaptable, with ability to have valuable input to many aspects of a project.</li> </ul>