

101160-MEC-1MOSY-E-2005

Mechanical Commissioning & Start-up Engineer

Holds a B. Sc. in Production Engineering and has about 16 years of solid experience in different facets of Power Plant industry.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 24/02/1983
Gender : Male
Marital Status : Married

EDUCATION

: B. Sc. in Production Engineering, Alexandria University, 2005

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : On-shore training course in West Delta Electricity Production Company in Abu Qir Training Centre on the operation of combined cycle power plants (Mar. 2007).
- : On-shore training course in the components and operation of high and medium voltage and generators, held in Nubaria Power Plant (Sep. 2007):
 - Generator Design & Structure.
 - Generator Auxiliary Systems.
 - Maintenance for Generator & Generator Auxiliary Systems.
 - Operation for Generator & Generator Auxiliary Systems.
 - 500/220/6.3KV operation.
- : On-shore training in erection, operation and maintenance of solar treatment plant at Nubaria III Power Station, held by Intec Energia.
- : Off-shore operation training course (160 hours) of 400MW HRSG for Nubaria Power Station, held in Milan – Italy by (STF) Company (May/Jun. 2009).
- : On-shore training on GE 9FA Gas Turbine in Nubaria Power Station.
- : Training Course on SIEMENS Gas Turbine V94.3A.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Dec. 2021 till now
Employer : EI Sewedy Power
Project : Layyah 1026MW Combined Cycle Power Plant - UAE
Job title : MECH. COMMISSIONING & START-UP ENGINEER
Job Description :

- Manage the execution of pre-commissioning, commissioning and start-up for GT and BOP.
- Commissioning and startup for MHI GT frame 701F.
- Carry out all commissioning and pre-commissioning activities of fuel gas system from gas reducing system to gas compressor and gas turbine filter skid included pressure test, blow out, purge by nitrogen and nitrogen container generation commissioning.
- Fuel oil system Flushing, nozzle test, bucket test, flow test, leak test and flow divider skid.
- Water Injection System flushing and tests.
- Lube oil system. Flushing and test and pressure Adjustment.
- Control oil system. Flushing, pressure Adjustment for control oil and accumulator N2 pressure.
- Instrument air system Compressor heat run test, instrumentation air blowing.
- Start-up Tasks: Initial Roll test, over speed Trip Test, Start-up Sequence.
- Turbine Check at 3600 rpm, Start-up tasks Full Speed No Load, Start-up Tasks Initial.
- Synchronization (Base Load), Start-up Tasks.
- Carry out all commissioning and pre-commissioning activities of forced cooling system (generator cooling and seal oil cooling), co2 system.

Dates : From Jul. 2020 till Dec. 2021
Employer : GE
Project : Amandi 200MW Combined Cycle Power Plant - Ghana
Job title : Operation Manager
Job Description :

- Prepared, started and run GE Frame 9E.04 gas turbine and BHGE steam turbine.
- Operated heat recovery steam generator HRSG, managed water and steam cycle to ensure high quality steam to steam turbine.
- Operate and run fuel oil treatment plant and desalination & water treatment plant to produce high purity fuel and water.
- Achieved contractual operational obligations through hands-on coordination of commissioning and testing activities with project construction team.
- Interpreted and proposed modifications to Distributed Control System DCS logic that improved plant control efficiency.
- Commissioned and test ran Balance of Plant systems in coordination with Project Construction team.
- Led and managed operation team.

Dates : From Nov. 2016 till Apr. 2020
Employer : [EGYPTROL](http://www.egyptrol.com), SIEMENS AG Subcontractor

Project	: BURULLUS POWER PLANT IN EGYPT CCPP 4800MW The facility is a 2 x 2 x 1 combined cycle configuration, consisting of: <ul style="list-style-type: none"> • 8 SIEMENS (Frame 8000H) gas turbines. • 8 NEM HRSG triple pressure reheat cycle. • 4 SIEMENS Steam Turbines.
Job title	: MECH. COMMISSIONING & START-UP ENGINEER
Job Description	: <ul style="list-style-type: none"> • Carry out all commissioning and pre-commissioning activities of fuel gas system from gas reducing system to gas compressor and gas turbine filter skid included pressure test, blow out, purge by nitrogen and nitrogen container generation commissioning. • Carry out all commissioning and pre-commissioning activities of forced cooling system (generator cooling and seal oil cooling), co2 system, water firefighting system, cooling tower, circulating system, service water system and closed cooling system. • Reviewing drawings and specifications to ensure a thorough understanding of plant operational and safety related issues. • Applying the project Commissioning Plan in the execution of the work. • Lead and coordinate BOP commissioning activities. • Lead, manage and coordinate Operation activities and vendor service specialists at site and office. • Reporting to the SIEMENS Commissioning manager. • Conduct meeting with commissioning manager to review testing, commissioning progress and HSE conformance on daily and occasionally more frequent basis as well as meetings with the vendors to resolve any equipment related problems. • Analyze and addresses critical areas of progress/delays in testing and commissioning. • Organizing a commissioning team, incorporating the training and helping recruiting the required staff and operation team. • Ensuring that all safety and precautionary requirements and procedures are followed during the commissioning process in line with the commissioning schedule. • Conduct commission ability reviews of project documents. • Ensure all construction activities are completed prior to taking up the system for commissioning.
Dates	: From Jan. 2015 till Nov. 2016
Employer	: Middle Delta Electricity Production Company
Project	: Nubaria Power Plant (3x750MW) Nubaria (1 & 2) 1500MW: 4 gas turbines Siemens V94.3A2, Two ALSTOM horizontal HRSG and Two Steam Turbines Mitsubishi TC2F-35.4". Nubaria (3) 750MW: 2 GE gas turbines GE MS9001FA, Two STF horizontal HRSG and one ALSTOM steam turbine.
Job title	: HRSG Maintenance Engineer
Job Description	: Carry out for Two STF horizontal HRSG as following: <ul style="list-style-type: none"> • Carry out all boiler Pumps and motors and tests. • Hanger supports cold setting adjusting and hot setting checking during boiler running. • Safety valves testing. • Function check for all signals and valves.

- Start-up / shut down sequence checking as per manufacture instructions.
- Trouble shooting supporting and maintenance program making as per vendor recommendations.
- Carry out all HRSG tests.

Dates	:	From May 2014 till Jan. 2015
Employer	:	EGYPTROL , SAMSUNG C&T Subcontractor
Project	:	Qurayyah Independent Power Project (6x750MW) – Combined Cycle
Job title	:	Gas Turbine Commissioning & Start-up Engineer
Job Description	:	<ul style="list-style-type: none"> • The Qurayyah IPP Project is approximately 100 km south of the port of Dammam on the coast in the Eastern province of the kingdom of Saudi Arabia. The facility is a 2 on 1 combined cycle configuration consisting of twelve (12) Siemens SGT6-PAC 5000F gas turbine generating units (GTGS), twelve (12) heat recovery steam generators (HRSGs), six (6) Siemens SST6-4000 steam turbine generators (STGs), and six (6) sea water condensers. • The Siemens Energy, Inc. SGT6-5000F (5) Gas Turbine includes a 13-stage high efficiency axial flow compressor with variable inlet guide vanes (IGVs) and three rows of variable guide vanes (VGVs). It also includes a combustion system featuring advanced cooling and multi-fuel capability. Within this system is an installed combustion chamber, which houses 16 individual combustors. These combustors are arranged in a circular pattern around the circumference of the turbine assembly. The four-stage reaction-type turbine incorporates an advanced cooling design. Corrosion resistant coatings and thermal barrier coatings are also integrated into the SGT6-5000F (5) turbine design in order to improve part longevity. • Carry out all commissioning activities of gas turbine (SIEMENS SGT6-PAC 5000F) for: <ul style="list-style-type: none"> - Fuel gas system air blowing and leak test. - Fuel oil system. Flushing, nozzle test, bucket test, flow test, leak test and flow divider skid Test. - Water Injection System (Dry Low NOX– Dual Fuel). Flushing and tests. - Lube oil system. Flushing and test and pressure Adjustment. - Control oil system. Flushing, pressure Adjustment for control oil and accumulator N2 pressure. - Instrument air system. Compressor heat run test, instrumentation air blowing. - Inlet guide vane IGV and variable guide vanes VGVs adjustment. - Gas turbine Fire Protection System. - Turning gear system. Low speed, high speed turning gear motor solo test and heat run test. - Air intake system. Pulse air filter self-cleaning system commissioning and puff test. - Generator and collector blower. Commissioning. - PCC package and SFC package HVAC commissioning and start-up. - Kettle Boiler and Rotor Cooling System. Air blowing by start-up frequency convertor (SFC) at speed 850 RPM. - Compressor Water Wash System. Flushing and tests. - Cooling Air / Compressor Bleed System and Disc Cavity Cooling

System. Air blowing by start-up Frequency convertor (SFC) at speed 850 RPM.

- High load Purge Air System. Air blowing and tests.
 - Pre-start Simulations (SFC/Gas).
 - Start-up Tasks: Initial Roll test, Over speed Trip Test, Start-up Sequence: Pre-synchronous Turbine Check at 3600 rpm, Start-up tasks Full Speed No Load, Start-up Tasks Initial Synchronization (Base Load), Start-up Tasks – Performance Test.
- Operate the gas turbine Siemens SGT6-5000F (5) from DCS using SPPA T3000 Control System.

Dates : From Oct. 2010 till May 2014
Employer : Middle Delta Electricity Production Company
Project : Nubaria Power Station Module III:

- Two GE CTG x 250MW type MS9001 (9FA).
- Two STF horizontal HRSG.
- One ALSTOM STG 250MW (HP, IP, LP).
- 500KV switchyard.
- Medium and low switchgears.
- Module auxiliaries.

Job title : Maintenance Engineer
Job Description :

- Attending installation and construction steps to HRSG & steam turbine.
- Chemical cleaning for tow STF HRSG.
- Steam blowing for two STF HRSG & stem piping.
- Commissioning, start-up and operation for HRSG & steam turbine.
- Attending first rolling to steam turbine with ALSTOM operator engineers.
- Working as DCS Operator Engineer during reliability period.
- Approving Designs, Submittals, Site Acceptance Tests & Commissioning.
- Pumps & Valves (Initec Energia).

Dates : From Jan. 2007 till Oct. 2010
Employer : Middle Delta Electricity Production Company
Project : Nubaria Power Station Module I & II:

- Two SIEMENS CTG x 250MW type V94.3A.
- Two ALSTOM horizontal HRSG.
- One MITSUBISHI STG 250MW (HP, IP, LP).
- 500KV switchyard.
- 220KV switchyard.
- Medium and low switchgears.
- Module auxiliaries.

Job title : Graduated from CRO up to Shift Charge Engineer
Job Description :

- Participated at commissioning and start-up of four Siemens CTGs 250MW.
- Participated at commissioning and start-up of four horizontal HRSGs.
- Participated at commissioning and start-up of two Mitsubishi STGs 250MW.
- Safe operation for GTG Siemens 250MW x 4 UNIT and all auxiliaries during the reliability period.

- Energizing of 500KV and 220KV substation.
- Switchgear 6.3KV and MCC 400 v for all plant auxiliaries.
- Responsible for the operation of three (3) generation blocks which included but not limited to the following:
 - Four (4x250MW) Siemens GTG.
 - Four (4) Alstom HRSG.
 - Two (2x250MW) Mitsubishi STG.
 - Two (2x250MW) GE GTG.
 - Two NEM HRSG.
 - One (1x250MW) Alstom STG.
 - 220/500KV Substation.

- Field of experience :**
- About 16 years of solid experience in different facets of Power Plant industry.
 - Strong understanding with different EPCs philosophies in power generations and transmissions.
 - Well-exposed and experienced in the Operation, Commissioning and Start-up of the following different types of units:
 - Siemens Gas Turbine SCC5- 8000H.
 - Siemens Gas turbine SGT6-PAC 5000F (230MW).
 - Siemens Gas Turbine V94.3A (250MW).
 - GE Gas Turbine 9FA (250MW).
 - Mitsubishi Steam Turbine (250MW).
 - Siemens SST6-4000 steam (230MW).
 - Alstom Steam Turbine (250MW).
 - STF Horizontal HRSG.
 - NEM Horizontal HRSG.
 - Alstom Horizontal HRSG.
 - BHI Horizontal HRSG.
 - GE gas turbine Frame 9E.04.
 - BHGE steam turbine.
 - MHI GT 701F.
 - Possess strong leadership and dynamic interface in a team environment and working with others to achieve the best possible output from all functional viewpoints.
 - Actively display initiative in the development and modification of existing design with the responsibility for meeting customer requirements and company internal requirements for mechanical scope.
 - Support the technical development of the Mechanical Engineering and Design functions through the evaluation and introduction of new design and analysis capabilities.
 - Demonstrated ability to work independently or to lead a team to complete projects within required timeframes.
 - Demonstrated abilities and passion for providing technical advice to staff members, and embracing a culture that values team work.
 - Control Systems Experience:
 - Xp teleperm (TXP).
 - SPPA-T3000.
 - Yokogawa Centum CS 3000.

- Mark VI.
- Ovation.