

100986-MEC-1OSY-E-2005
Commissioning & Start-up Manager

Holds a B. Sc. in Mechanical Power Engineering and has about 16 years hands-on experience working in maintenance, operation, commissioning and start-up of Combined Cycle Power Plants.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 01/10/1977
Gender : Male
Marital Status : Married
Residence : Mahmoudia

EDUCATION

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

LANGUAGES

Arabic : Native Language
English : Fluent

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : PMP – Project Management Professional (PMI) in The Arab Academy for Science and Technology & Maritime Transport.
- : Operating and maintenance of gas turbine frame M701F – 750MW.
- : Maintenance and operation of steam turbine (Ansaldo).
- : Fire fighting design system in Engineers Syndicate.
- : Dual cycle turbine operation in El-Mahmoudia Electric Company.
- : TOSHIBA Horizontal Pumps & Vertical Sump Pumps System.
- : NEM Company for Heat Recovery Steam Generators.
- : Yokogawa Middle East (YME) – Bahrain.
- : CENTUM CS 3000 R3 Fundamentals for operation.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2018 till Nov. 2019
Employer : TRACTEBEL ENGIE

Project : ADD-ON GRATI BLOCK 2 PROJECT 150MW (INDONESIA)
(3 CMI HRSG and DOOSAN SKODA POWER STEAM TURBINE
(Tp104980-D_0) 195MW)

Job title : Commissioning & Start-up Manager / Consultant

Job Description :

- Review and improvements to commissioning procedure including safety review.
- Witness equipment /System mechanical completion and follow-up MCC punch list.
- Review mechanical completion certificate package (MCC).
- Witness pre-commissioning activities.
- Attend commissioning meeting.
- Ensuring that equipment testing parameters complying with its specification.
- Review the commissioning Procedures.
- Review the commissioning method statements.
- Review testing incident /default reports.
- Liaising with Contractor's commissioning engineers.
- Supervising TEI engineering and technical staff during commissioning.
- Provide technical leadership to TEI Engineers and expertise to facilitate safe, reliable, commissioning activities.
- Develop recommendations to improve commissioning activities.
- To ensure the safe testing and commissioning of completed installations to achieve the necessary plant performance in accordance with the project requirements.
- Monitoring progress and recording all test results, witnessing final testing and acceptance of equipment and compilation of all commissioning documentation.
- Identifying problems and shortcomings with existing systems and providing recommendation and develop testing and commissioning reports and commissioning book.

Dates : From Sep. 2017 till Jul. 2018

Employer : LOTTE E&C

Project : Grati CCPP Extension PJT 450MW in INDONESIA
(2x125 ANSALDO COMBINED CYCLE UNITS (AE94.2) GAS TURBINE,
2 HRSG (DOOSAN) and 1x125 SKODA STEAM TURBINE (MTD50CRA))

Job title : Lead Commissioning & Start-up Engineer

Job Description :

- Make solo run test to pumps.
- Make aliment to pumps.
- Carry out all commissioning activities for ANSALDO gas turbine AE94.2 as per manufacture recommendation.
- Follow-up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system ...).
- Follow-up Commissioning & start-up for GT AUXILIARY.
- Cold commissioning for RDS in main position and reverse position.
- Cold commissioning for Lifting oil Pump to lift shaft.
- Cold commissioning for Fuel Gas Valves Stroke from (0 to 100) %.
- Cold commissioning for IGV Valve stroke and blade angle.
- Cold commissioning for blow off System and valves open and close time.
- Cold commissioning for lube oil orifice to adjust presser on bearing.

- Installing and fixing speed sensors.
- Hot commissioning for Fuel Gas Valves Stroke during start to base load.
- Hot commissioning for IGV Valve stroke during start to base load.
- The project daily works (piping, welding, and all auxiliary equipment).
- Commissioning & start-up for firefighting system for gas turbine portion.
- Line up for (lube oil, control oil, air and fuel gas, instrument air,...) before initial fire.
- Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed Water system pipe-lines.
- Perform the steam blow-out activities for HP steam, IP steam and LP steam lines.
- Adjusting the cleaning force ratio from 1.2 to 1.4.
- Make Steam blowing without target to shore pipes is clean.
- Make steam blowing with target to reach to acceptable target result.
- Make service blowing to bypasses.

Dates	:	From Apr. 2016 till Jul. 2017
Employer	:	SAMSUNG C&T
Project	:	Umm Al Houl Power IWPP (2500MW total load) (6x270 SIEMENS COMBINED CYCLE UNITS (SGT5-4000F) GAS TURBINE, 6 HRSG (NOOTER ERIKSEN) and 4x220 SIEMENS (SST5-4000F) STEAM TURBINE)
Job title	:	Senior Commissioning & Start-up Engineer
Job Description	:	<ul style="list-style-type: none"> • Make solo run test to pumps. • Make heat run test to pumps. • Make aliment to pumps. • Carry out all commissioning activities for SIEMENS gas turbine SGT5-4000F as per manufacture recommendation. • Follow-up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system ...). • Follow-up Commissioning & start-up for GT AUXILIARY. • Cold commissioning for HCO in active position and reverse position. • Cold commissioning for Lifting oil Pump to lift shaft. • Cold commissioning for Fuel Gas Valves Stroke from (0 to 100) %. • Cold commissioning for IGV Valve stroke and blade angle. • Cold commissioning for blow off System and valves open and close time. • Cold commissioning for cooling air valves. • Cold commissioning for lube oil orifice to adjust presser on bearing. • Installing and fixing speed sensors. • Hot commissioning for Fuel Gas Valves Stroke during start to base load. • Hot commissioning for IGV Valve stroke during start to base load. • The project daily works (piping, welding, and all auxiliary equipment). • Commissioning & start-up for firefighting system for gas turbine portion. • Line up for (lube oil, control oil, air and fuel gas, instrument air,...) before initial fire. • Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed Water system pipe-lines. • Perform the steam blow-out activities for HP steam and LP steam lines. • Adjusting the cleaning force ratio from 1.2 to 1.4. • Make Steam blowing without target to shore pipes is clean.

- Make steam blowing with target to reach to acceptable target result.
- Make service blowing to bypasses.

Dates : From Apr. 2015 till Mar. 2016
Employer : GE Power & Water
Project : Assiut Project (1000MW total load) (8x125 simple CYCLE UNITS frame 9E)
Job title : Senior Commissioning & Start-up Engineer
Job Description :

- Make solo run test to pumps.
- Make heat run test to pumps.
- Make aliment to pumps.
- Carry out all commissioning activities for GE gas turbine frame 9E as per manufacture recommendation.
- Follow-up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system ...).
- Follow-up Commissioning & start-up for GT AUXILIARY.
- Cold commissioning for juking oil Pump to lift shaft.
- Cold commissioning for Fuel oil Valves Stroke from (0 to 100) %.
- Cold commissioning for IGV Valve stroke and blade angle.
- Cold commissioning for blow off System and valves open and close time.
- Cold commissioning for cooling air valves.
- Cold commissioning for lube oil orifice to adjust presser on bearing.
- Hot commissioning for Fuel oil Valves Stroke during start to base load.
- Hot commissioning for IGV Valve stroke during start to base load.
- The project daily works (piping, welding, and all auxiliary equipment).
- Commissioning & start-up for firefighting system for gas turbine portion.
- Line up for (lube oil, control oil, air and fuel gas, instrument air, ...) before initial fire.

Dates : From Aug. 2013 till Apr. 2015
Employer : [EGYPTROL](http://www.egyptrol.com) – Commissioning Subcontractor for SAMSUNG C&T
Project : Qurayyah Independent Power Project (6x750MW) – Combined Cycle
Job title : Senior Commissioning & Start-up Engineer
Job Description :

- Make solo run test to pumps.
- Make heat run test to pumps.
- Make aliment to pumps.
- Carry out all commissioning activities for SIEMENS gas turbine SGT6-5000F as per manufacture recommendation.
- Commissioning & start-up for SIEMENS gas turbine SGT6- 5000F.
- Follow-up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system ...).
- Follow-up Commissioning & start-up for GT AUXILIARY.
- Cold commissioning for Lifting oil Pump to lift shaft.
- Cold commissioning for Fuel Gas Valves Stroke from (0 to 100) %.
- Cold commissioning for IGV Valve stroke and blade angle.
- Cold commissioning for blow off System and valves open and close time.
- Cold commissioning for cooling air valves.
- Cold commissioning for lube oil orifice to adjust presser on bearing.
- Hot commissioning for Fuel Gas Valves Stroke during start to base load.
- Hot commissioning for IGV Valve stroke during start to base load.

- The project daily works (piping, welding, and all auxiliary equipment).
- Follow up Commissioning & start-up for firefighting system for gas turbine portion.
- Line up for (lube oil, control oil, air and fuel gas, instrument air,...) before initial fire.
- Assist gas turbine operation staff on daily basis to achieve the optimum operation conditions for the units.
- Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed Water system pipe-lines.
- Perform the steam blow-out activities for HP steam and LP steam lines.
- Adjusting the cleaning force ratio from 1.2 to 1.4.
- Make Steam blowing without target to shore pipes is clean.
- Make steam blowing with target to reach to acceptable target result.
- Make service blowing to bypasses.

Dates	:	From Jul. 2008 till Jul. 2013
Employer	:	Middle Delta Company of Electricity Production
Project	:	EL-ATF Combined Cycle Power Station: <ul style="list-style-type: none"> • Mitsubishi Gas Turbine (Frame M701F), two units – 250MW each one (Diasys). • 21/220KV Set Up Transformers. • One Steam Turbine. • Steam turbines auxiliaries. • Two HRSG. • 6.6KV Switchgear.
Job titles	:	Senior Commissioning & Start-up Engineer
Job Description	:	<ul style="list-style-type: none"> • Carry out all commissioning activities for MITSUBISHI gas turbine units frame M701F as per manufacture recommendation. • Commissioning & start-up for MITSUBISHI gas turbine units frame M701F. • Follow-up pre-commissioning (lube oil flushing, control oil flushing, gas line, closed cooling system ...). • Follow-up Commissioning & start-up for GT AUXILIARY. • Cold commissioning for Fuel Gas Valves Stroke from (0 to 100) %. • Cold commissioning for IGV Valve stroke and blade angle. • Cold commissioning for blow off System and valves open and close time. • Cold commissioning for cooling air valves. • Cold commissioning for lube oil orifice to adjust presser on bearing. • Hot commissioning for Fuel Gas Valves Stroke during start to base load. • Hot commissioning for IGV Valve stroke during start to base load. • Follow up the project daily works (piping, welding, and all auxiliary equipment). • Follow up Commissioning & start-up for firefighting system for gas turbine portion. • Line up for (lube oil, control oil, air and fuel gas, instrument air,...) before initial fire. • Assist gas turbine operation staff on daily basis to achieve the optimum operation conditions for the units. • Perform the chemical cleaning according procedures for HRSG & Condensate System & Feed Water system pipe-lines.

- Perform the steam blow-out activities for HP steam, IP steam and LP steam lines.
- Adjusting the cleaning force ratio from 1.2 to 1.4.
- Make Steam blowing without target to shore pipes is clean.
- Make steam blowing with target to reach to acceptable target result.
- Make service blowing to bypasses.

- Dates** : From 2005 till Jun. 2008
- Employer** : Middle Delta Company of Electricity Production
- Project** : Mahmoudia Combined Cycle Power Station:
- General Electric Gas Turbine (Frame 5), 8 sets – 25MW each one (Mark II).
 - Rolls Royce Gas Turbine (Double End – SK 60), 4 sets – 50MW each one.
 - 220/66/11KV Transformers substations.
 - 11/220KV Set Up Transformers.
 - 220KV Switchyard (Sf6 circuit breakers – Isolators – wave Trap – Surge arrestor, etc.
 - General Electric Steam Turbine (Mark V) 2 sets.
 - Steam turbines auxiliaries (DCS) Control.
 - Water treatment (PLC) control.
 - Tube cleaning & Debris filter system (PLC).
 - Feeder 220KV (6 sets) & feeder (66KV).
 - 11/6KV Transformers.
 - 6.6KV Switchgear (Sf6 circuit breakers).
- Job title** : Shift Engineer
- Job Description** :
- Unit start-up and shutdown procedures.
 - Monitoring parameters.
 - Testing the equipments.
 - Isolation and de-isolation procedures.
 - Safety work permit system
 - I watch-ness for the following maintenance sections for General Electric units frame (5) 25MW:
 - Overall major maintenance, including:
 - Take out and maintenance the turbine rotor.
 - Replacement the turbine blades.
 - Take out the generator rotor.
 - Combustion inspection, including:
 - Fuel nozzles, fuel line and fuel valves inspection.
 - Combustion chambers and cross fire tubes inspection.
 - Hot gas path inspection, including:
 - Combustion inspection steps.
 - Remove the turbine casing.
 - Remove and inspect transition pieces.
 - Remove and inspect the first stage nozzle.
 - Major inspection, including:
 - Combustion inspection steps.
 - Hot gas path inspection steps.
 - Remove accessory coupling and load coupling.
 - Inspect and check alignment.

- Take initial rotor position check.
- Establish solid foundation and install mech.
- Support jacks under compressor and turbine casings.
- Remove compressor upper half's casings.
- Remove turbine upper half casing.
- Remove exhaust hood.
- Remove upper half inlet casing.
- Take turbine and compressor clearance checks.
- Remove and inspect 1st and 2nd stage nozzles.
- Remove and inspect No. 1, No. 2 and thrust bearing (load & unload).
- Inspect 1st and 2nd stage buckets.
- Inspect 1st and 2nd stage shrouded tip buckets.
- Check and adjust rotor floating.
- I also watch-ness for the following maintenance sections for steam turbine GE (56MW) Mark V:
 - Make major inspection, including:
 - Measure and record rotor radial position.
 - Measure and record rotor axial position.
 - Check couplings run-out.
 - Record alignment details.
 - Measure journals diameters.
 - Perform diaphragms alignment checks and all required adjustments.
 - Pumps maintenance and balancing.
 - Overall maintenance for condensate pumps malted stages (5 stages), vertical pumps.
 - Maintenance for travel screen and main cooling pumps, hydraulic power unite, air compressors and steam turbine auxiliaries such as ejectors, lubrication system and condenser.

- Field of experience :**
- Significant experience in combined cycle turbine generators and power plant mechanical systems.
 - Specialized expertise includes mechanical engineering, cold and hot commissioning and start-up, field inspection, quality control, safety regulations, and environmental compliance.
 - Participated in all phases of combined cycle project work, including: start-up, commissioning, operations and monitoring, maintenance, turnover and schedule and documentation review.
 - Significant experience working on gas turbines, steam turbines and Heat Recovery Steam Generators (HRSG).