

Holds B. Sc. and M. Sc. in Mechanical Power Engineering and has about 8 years hands-on experience working as Project Support Engineer, Lead Performance Engineer and Gas/Steam Turbine Engineer.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 22/05/1989
Gender : Male
Marital Status : Married
Residence : Mansoura

EDUCATION

: B. Sc. in Mechanical Power Engineering, Mansoura University, 2011
: M. Sc. in Mechanical Power Engineering (Gas Turbines), Mansoura University, 2017

LANGUAGES

Arabic : Native Language
English : Very Good
German : Basics

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: Microsoft Visual Studio Programming (Visual Basic - C++ - C#)
: Matlab

TRAINING COURSES AND CERTIFICATIONS

: Project Management Professional (PMP).
: SIEMENS SGT5-8000H Combined Cycle Power Plant, Familiarization and Operations with SPPA-T3000.
: Effective Training (HRD Academy).
: AutoCAD
: Programmable Logic Controller (PLC).
: Graphics Diploma (Adobe Ps, Id, Fl, Ai and Corel DRAW).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Oct. 2015 till now
- Employer** : Middle Delta Electricity Production Co. (MDEPC)
- Job title** : Project Support Engineer
- Job Description** :
- Provide technical, contract and project management support for Burullus 4x1200MW CCGT Power Plant EPC Project. Responsible for advising senior management on technical issues and interpreting to contract terms. In addition to supporting the project, through negotiation, representational of contracts and ensuring compliance with contractual terms and conditions.
 - Supervise commissioning of turbines, HRSG, hydraulic systems, fuel gas systems.
 - Coordinate, work together, perform quality controls, monitor progress and ensure that systems are built and function as designed with a satisfied customer as a result.
 - Review design data, P&IDs, heat balance, process flow diagrams, redundancy concept , and applicable standards.
 - Witness factory acceptance tests, reviewing test procedures and applicable standards.
 - Procurement management, and review nominated suppliers proposals for approval while selecting suppliers and material best suited to project requirements.
 - Reviewing drawings and documentation from suppliers, to ensure that they follow technical requirements, applicable codes and standards.
 - Project contract management, obligation management, support preparation of documentation required, identification of claims, develop negotiation strategies.
 - Support and participate in pre-award negotiations, bid structure, and contract development.
 - Monitor the progress of the project and suggest adjustments as necessary to ensure the successful completion of the project, write and finalize monthly progress reports.
 - Respond to requests for technical issue resolution, using technical product knowledge and analytical skills while adhering to sound engineering principles and standards.
 - Lead and manage root cause analysis for technical issues.
 - Prepare technical documents and reports and reply technical inquiries.

- Dates** : From Sep. 2016 till now
- Employer** : MDEPC
- Job title** : Lead Performance Engineer
- Job Description** :
- Provide technical expertise and leadership in the evaluation and enhancement of combined cycle thermal performance in support of contractual obligations and business development programs for the entire companies fleet in addition to Egypt Siemens Mega Project 3x4800MW CCGT.
 - Enhance power plant performance estimates by developing new tools to reliably perform these calculations and diagnostic objectives in a timely manner.

- Develop thermal performance testing procedures to demonstrate compliance with contractual performance guarantees.
- Conduct onsite gas turbine and combined cycle performance tests.
- Evaluate thermal performance utilizing thermodynamic, aerodynamic and fluid mechanics engineering principles demonstrated through hand and computer calculations.
- Assist with projects where reliability/ efficiency improvements can be made, planning and executing performance tests and monitoring OEM performance.
- Lead enhancement of the performance analysis capabilities of the Remote Monitoring Center (RMC).
- Internal fleet reporting and liaise with third party stakeholders including external parties.

Dates : From Aug. 2011 till Oct. 2015

Employer : Middle Delta Electricity Production Co. (MDEPC)

Job title : Gas / Steam Turbine Engineer

Job Description :

- Responsible for several heavy-duty gas and steam turbine projects (SIEMENS, ALSTOM and GE) operation, commissioning, failure root cause analysis, fact-finding, inspections and overhauls along relevant project guidelines with required quality and within the given timeframe.
- Lead all aspects of troubleshoot issues, perform investigations, implement corrective actions.
- Lead the response to requests for technical issue resolution, using technical product knowledge and analytical skills while adhering to sound engineering principles, standards, practices, procedures.
- Perform units start-up, shutdown as per demand and rectify operational faults.
- Support periodic field inspections of heavy gas turbines such as (CI), (HGPI) and (MI).
- Inspect the gas turbine components and identify the type of damages.
- Perform gas turbine combustion tuning.
- Performed components CAD modeling and FEA including static, dynamic, HCF, fracture, creep and rubbing.
- Perform fact-finding, borescope inspection, NDT and construct fault trees.
- Fractography analysis, vibrational FFT analysis and metallurgical analysis.
- Review OEM's upgrades and conducting post/pre-upgrade performance testing.

Technical Skills:

- Experience with SAP, MS Dynamics, MS Project and Primavera.
- Experience with power plant automation control system (T3000/TXP/DCS).
- FEA/CFD analysis with Solid Works Simulation, ANSYS and Autodesk Simulation.
- Single and Multiphase flow simulation with ANSYS CFX/ Fluent.
- Process simulation with Aspen HYSYS and PRO/II (Both Steady-state and Dynamic).

- 3D CAD part design and assembly with Solid Works, Autodesk Inventor, Siemens NX.
- 3D Plant design with layout and equipment, P&IDs with KKS code.

Publication:

"Effect of Steam Injection on the Performance of Heavy-duty Gas Turbine",
Mansoura Engineering Journal, ISSN - 0141-1110, Vol. 40, No. 3,
SEPTEMBER 2015.