#### 102556-MEC-1DGV-E-1985

# Technical Engineering Director

Holds a B. Sc. in Mechanical Power Engineering and MBA. Has over 35 years of experience in the field of Fossil Power Plants Engineering, Piping Layout Design, Piping Stress & Flexibility analysis, and Pipe Supporting Design & Selection. Managing and leading Plant Design Engineering Discipline and supporting multi projects with central functional Staffing in different Plant Design activities. He has been deeply involved in the conceptual, front-end engineering, detailed design and contracts execution of more than twenty Power Plant Projects (SCPP, CCPP & TPP (Supercritical & Subcritical)). Very long experience and knowledge of the engineering tools, Software & Equipment Suppliers.

## PERSONAL DATA

Nationality : Egyptian Gender : Male

#### **EDUCATION**

B. Sc. in Mechanical Power Engineering, Cairo University, 1985

Master of Business Administration (MBA), The International Business School

of Scandinavia (IBSS), 2018

## LANGUAGES

Arabic : Native Language

English : Very Good

## COMPUTER SKILLS

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

 Total Installation Costs (TIC), BECHTEL, Fredrick, USA, BECHTEL Offices (Sep. 1998).

: Supervisor's Development Program, BECHTEL, Cairo, Egypt, PGESCo Office (Jul. 2000).

 LLOYD'S Internal Quality Auditor Training, LLOYD'S, Cairo, Egypt, PGESCo Office (Oct. 2001).

: Piping Stress Analysis using Bechtel Private developed Piping Stress Analysis program (ME101), BECHTEL, Fredrick, USA, BECHTEL Offices (Apr. 2003).

 Leading Six Sigma (Attending), BECHTEL, Concorde El Salam Hotel, Cairo, EGYPT (Mar. 2004).

: Moving to Management (Essential Management Skills, Goal Setting and Action Plan Concept and Coaching Strategies), International Experts for Technologies Group (IE-Group), Cairo, Egypt, PGESCo Office (Nov. 2008).

- : Computerized Information Management, AUC, Cairo, Egypt (Dec. 2011).
- : Risk Assessment ISO 9001:2015 (Attending), LLOYD'S, Cairo, Egypt (Jan. 2016).

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Dec. 2022 till now

**Employer**: ELOSEILY CONSULTING ENGINEERS

Job title : Technical Engineering Director

Job Description : • Participate in development of business efforts and develop technical

proposals and projects.

 Managing the process of 3D Model Development for different proposals/projects and performing as needed design effort for Piping Design Layout, including the related activities (Layout, Stress Analysis,

Piping Supports, etc.).

Green Hydrogen projects and system development.

Dates : From Jun. 2007 till Dec. 2022

**Employer** : PGESCo

Job title : Chief Plant Design Engineer

**Job Description**: • Manage Engineering activities within the plant design discipline.

 Provide technical /expert support to project teams and ensure technical quality.

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Make recommendations for key engineering staff assignments.

- Conduct Annual Performance Reviews, coaching, and career development discussions with employees.
- Participate in developing and updating DBP (Discipline Business Plan) and aligning with overall engineering disciplines target and plans.
- Review discipline EPPR's (Engineering Progress Performance Report) as received from all running projects.
- Review all projects DDPF (Detailed Discipline Personnel Forecast) and propose the suitable staffing resolutions to the MOE.
- Review and approve all applicable lessons learned in accordance with the company EDP (Engineering Department Procedures).
- Responsible for the establishment and maintenance of Technical Standards, including the development of project specific standards.
- Provide functional oversight for discipline within PGESCo, undertake functional discipline reviews.
- Participate and lead different projects POW (Project of the Week review), and Technical Reviews as applicable in accordance with the company Engineering Department Procedures (EDP).
- Conducting Discipline All Hands Meeting (on monthly basis) or as applicable.
- Directing and facilitating discipline specialists to obtain membership in different engineering societies that match specialty target plans.
- Estimating new project / proposals discipline engineering budget hours.
- Preparing all new proposals site general arrangement and align it with Owner development plan.
- Participate in releasing all discipline Standard specifications.

- Supporting all Plant Design EGS's in different projects with staffing, technical and managerial support they need to meet each project schedule as much as possible without hurting the overall discipline performance in all other projects.
- Participate in developing and releasing the annual training plan for each individual in the plant design discipline.
- Coordinate with all running projects the Cold and Hot walk down verification program of the critical piping and supports systems, communicating with project start up and construction teams at job sites with engineering staff (stress and supports designers), and assign the proper individuals to each project activity.
- Establish staff recruitment criteria Ensures mix of skills / talents / experience to match Discipline Business Plan.
- Responsible for safety awareness and implementation within plant design discipline.

Dates : From Jan. 2003 till May 2007

**Employer** : PGESCo

Job title : Plant Design EGS & PD Specialist Engineer

**Job Description** 

- Participating with Bechtel central Piping Stress analysis team the critical piping stress analysis tasks in Frederick, USA.
- Responsible for performing the stress analysis for the Feed Water System for CAIRO NORTH & NUBARIA Projects, till issuing the final reports of the stress calculations and supports load reports.
- Participating with Cairo North project Piping Supports Design team, checking the Critical and Non-Critical pipe supports.
- Coordinating between PGESCo Cairo Office, (Bechtel) New Delhi and (Bechtel) Frederick office for all issues related to the Piping Stress Analysis and Piping Supports design.
- Preparing the front-end related works (Budget, Schedules, Site Lay out Drawings, Studies, Specifications, etc.) for all new projects.
- Responsible for setting up the working Plant Design Teams in all running projects in the company, according to each project needs according to the scope of work, budget, and duration.
- Central Responsible Engineer for all piping stress analysis work required for all projects.
- Participating in all works related to the discipline supervision with each individual project EGS.
- Performing Critical Piping systems walk downs for inspection and assuring piping & supports installation conforms to the design works.
- Plan, develop, coordinate and review engineering work within the discipline in all projects.
- Participating in preparation of discipline estimates and work plan in accordance with project scope, schedule, and budget, and manages implementation and performance accordingly.
- Estimate staffing needs and schedules and assigns work to meet schedule dates.
- Review and approve key engineering drawings and calculations, including field and design documents relating to the discipline.
- Preparing all proposals for new projects.

- The above listed activities were carried out on the below listed projects:
  - Cairo North Combined Cycle Project (2x2x1), 2x750MW.
  - NUBARIA C.C. Power Station (2x2x1), 3x750MW.
  - New TALKHA C.C. Power Station (2x2x1), 750MW.
  - KUREIMAT C.C. Power Station (2x2x1), 2x750MW.
  - TEBBIN Thermal Power Station, 2x350MW.
  - Cairo West Power Station Units 7 & 8, 2x350MW.
  - SIDI KRIR C.C. Power Station (2x2x1), 1x750MW.
  - EL-ATF C.C. Power Station (2x2x1), 1x750MW.
  - Abu Qir Thermal Power Plant, 2x650MW.

Dates : From Dec. 2001 till Jan. 2003

**Employer** : PGESCo

**Project**: Nubaria Combined Cycle Power Plant (2x750MW)

Job title : Plant Design Engineering Group Supervisor

**Job Description**: • Developing Plant Design related issues programs and calculations.

• Monitoring Plant Design Staff performing in current running jobs.

 Assisting Engineering Manager in different issues related to Plant Design Discipline.

 Participating with specialist engineering team for preparing proposals for new jobs and offers (2x150MW Combined Cycle Plant, 4x330MW Thermal Power Plant, Preparing Proposals Layout drawings, specifications, studies budget and schedules.

Dates : From Dec. 1998 till Nov. 2001

**Employer** : PGESCo

Projects: Egypt Boot #1, SIDI KRIR Units 3 & 4 Power Plant (2x340MW)

Job Description : Plant Design Engineering office and site support for construction and startup activities participating in the following activities as the Plant Design scope

of work:

- Prepare site arrangement drawings for Owner approval.
- Prepare general arrangement / equipment location drawings for Owner approval, of all facilities for the site including Turbine building, Circulating Water Intake Structure, Water Treatment area, Auxiliary Boiler / Reboiler area, and Fuel Oil Unloading and Transfer area.
- Routing of all 65mm and larger above ground piping (Critical and non-Critical piping systems) in the 3D model environment and preparing fabrication / construction isometrics (18,000 linear meters of Large Bore A/G piping systems).
- Routing of all underground piping in the 3D model environment and preparing fabrication / construction underground piping drawings (4,200 linear meters of U/G piping systems).
- Routing of all 50mm and smaller pipe designated as critical pipe in the 3D environment and prepare and issue fabrication / construction isometrics.
- Design & Checking pipe supports for all 65mm and larger pipe (Critical / non-Critical piping systems) and all 50mm and smaller critical pipe in the 3D model and issue all hanger drawings for fabrication / construction (3500 Large Bore Pipe Supports & 1000 Small Bore Pipe Supports).
- Perform a stress analysis on all systems designated as critical piping

- systems.
- Interface with boiler manufacturer (B&W) for all piping interface tie-in and Bechtel routed pipe in the B&W designed boiler building.
- Interface with turbine contractor (Alstom) and condenser (Alstom) manufacturers for all pipe interfaces and equipment location needs.
- Review and approve all vendor drawings relating to equipment and mechanical systems.
- Coordinate with the MPA group for purchasing of pipe, pipe supports, and valves.
- Interface with pipe fabricator (B.F. Shaw/Shaw Nass) and pipe support fabricator (Specialties Support Systems & GRINNELL).
- Assign group's task.
- Interface with Project Engineer and other Discipline EGS's
- Attend all meetings related to the project needs (Inter Discipline, Vendors and construction).
- Attend and provide input at Short Term Work Plan Meeting.
- Monitor and update pipe and pipe support quantities.
- Monitoring schedule dates for all Plant Design activities accomplishment with the project schedule requirements and updating.
- Issuing all required reports to the Project Control, Project Management and Bechtel Plant Design Chief for reviewing.
- Perform as needed support to field Construction and start-up teams.
- Walk down the Critical Piping and supports for reviewing and assuring service functionally.
- Preparing the AS-BUILT General Arrangement Drawings, Underground Piping Drawings, critical piping isometric drawings for the major systems (Main Steam "AB", Feed Water "AE", and Extraction Steam & Heater Drains "AF").
- Supporting the Bechtel Staff personnel at job site and coordinating with FREU during the major tasks in close out phase and during the problems raised in this phase for turning over the plant to the owner.

**Dates** : From Jun. 1998 till Nov. 1998

**Employer** : PGESCo

Project: AL TAWEELAH "B" EXTENSION - ABU DHABI WATER & ELECTRICITY

AUTHORITY (ADWEA)

Job title : Plant Design Engineer

**Job Description**: • Plant Design Engineer at BECHTEL office in FREDRICK, MD.

• Participating in designing and checking 500(+) supports in different piping systems, critical/noncritical, typical and engineered pipe supports.

• 3D Modeling, Hanger drawing extracting and drafting using BECHTEL programs for such applications.

Dates : From Jun. 1997 till May 1998

**Employer** : PGESCo

Projects : SIDI KRIR Units 1 & 2 (2x300MW) and AYOUN MOUSSA Units 1 & 2

(2x300MW) Thermal Power Plants

Job Description : • Plant Design Engineering office and site support for construction activities and set recommend field modifications as required interference checking for contractor's interfaces.

Reviewing contractor's design/drawings with for compliance specifications and applied standard codes for general mechanical items.

Modifying and updating the General Arrangement, Equipment Location, isometric and support drawings according to the vendor design drawings as required per specifications and standard codes.

**Dates** From Jan. 1996 till May 1997

**Employer** Raytheon / EBASCo. Overseas Inc.

**Project** EL-KUREIMAT Power Plant (2x600MW, GE Steam Turbine) Plant Design / Mechanical Engineer, Technical Site Office Job title

Job Description field modifications as required, interference checking for contractor's

interfaces.

Reviewing contractor's design/drawings for compliance with

Engineering site support for construction activities and set recommend

specifications for general mechanical items.

Implementation of project Codes and Standards for different mechanical items especially for piping (Critical and non-critical) and supporting

devices.

**Dates** From Jun. 1995 till Dec. 1995

**Employer** Electric Power Systems Engineering Co. (EPS)

RAS SIDR & Tur Sinai at Sinai South (Diesel Power Station 4x2.5MW) **Project** 

Job title Piping Field Engineer

Supervising the Construction of diesel power stations in RAS SIDR **Job Description** 

(2x2.5MW) and Tur Sinai (2x2.5MW).

Reviewing contractor documents and drawings for compliance with project specifications for all the mechanical systems related to diesel

power stations.

From Apr. 1994 till May 1995 **Dates** 

**Employer** Electric Power Systems Engineering Co. (EPS) Job title Piping Stress Designer / Piping Support Designer

Job Description

Participated in preparing studies and proposals for different jobs awarded by the company.

Perform Stress Analysis and piping supports design Training sessions for other Piping design group members.

Supporting the construction engineering for any raised issues related to the piping stress analysis or pipe supports design for the CAIRO WEST 5 & 6 and AL-ARISH thermal power stations during the close out phase.

**Dates** From Jun. 1993 till Mar. 1994

**Employer** Raytheon EBASCo. Overseas Inc., USA, New York Office **Project** EL-KUREIMAT Power Plant (2x600MW, GE Steam Turbine)

In U.S. at RAYTHEON EBASCo Inc. New York Office for EL-KUREIMAT **Job Description** Power Plant (2x600MW); GE Steam Turbine, EGYPT).

> Participating in the design of the Critical Piping systems; pipe sizing calculations; optimization of the economical pipe routing; Piping stress analysis; supporting/restraining and pipe hanger design for the Main

www.egyptrol.com Page 6 of 8 Updated: Dec. 2023 Steam, Hot & Cold Reheat and high-pressure Feed Water piping systems.

**Dates** From Mar. 1992 till May 1993

**Employer** Electric Power Systems Engineering Co. (EPS)

**Project** ASH-SHUQYQ POWER PLANT (SAUDI ARABIA) – (Total of 1200MW)

Job title Plant Design Engineer

Participated in the conceptual design preparation using CAD works **Job Description** 

Software for General Layout for different plant facilities, Pipe routing,

Isometric and P&ID.

Preparation as a part of tender documents.

**Dates** From Apr. 1991 till Feb. 1992

Electric Power Systems Engineering Co. (EPS) **Employer** 

**Project** AL ARISH POWER PLANT (EGYPT) - Units 1 & 2 (2x30MW)

Participated in preliminary thermal Analysis of Power Station Cycles with Job Description different computer software.

Participated in the CAD works Software related to Power Plants, General

Layout, Pipe routing, Isometric and P&ID drawings. Preparation of specifications and tender documents.

**Dates** From Apr. 1990 till Mar. 1991

**Employer** Electric Power Systems Engineering Co. (EPS)

**Project** CAIRO WEST POWER PLANT (EGYPT) - Ext. Units 5 & 6 (2x330MW)

Stress Analysis of Power Station Cycles with different computer Job Description :

software.

Participated in the CAD works Software related to Power Plants, General

Layout, Pipe routing, Isometric and P&ID.

Preparation of tender documents.

Critical Piping Design, Sizing Calculations, and stress analysis.

Optimization of the most economical Pipe Routing design, and Piping

Participated in the CAD works related to Power Plants, General Lavout.

Supports design & Selection.

**Dates** From Mar. 1989 till Mar. 1990

Electric Power Systems Engineering Co. (EPS) **Employer** 

**Project** MELLITA POWER STATION (LIBYA) - (Total 1200MW - Design Works)

Pipe routing, Isometric and P&ID.

Preparation of specifications and tender documents.

**Dates** From May 1988 till Feb. 1989 ATOMIC ENERGY AUTHORITY **Employer** 

Job title Mechanical Engineer

Job Description

Junior Mechanical Engineer, participating in assisting Department Managers Job Description

in preparing PERT Program using my knowledge in Basic Code Language for some of the activities related to the operation of the Atomic Research

Reactor at ANCHASS Nuclear Research Center.

Dates : From Jun. 1985 till Apr. 1988 Employer : KHALIFA Computer Services

Job title : PC Computer Programmer & Private Business

**Job Description**: • Instructing Basic Programming Language and AutoCAD programs.

Working in creating high school educational tutorial programs.

Dates : From Jun. 1985 till Mar. 1986

Job Description : • Military Service.

Private Business.