



COMPANY PROFILE

jawda جودة
Engineering Consultants





Table of Contents

.....	Words from the CEO.....	06
.....	Company Overview.....	08
.....	Mission	11
.....	Vision.....	12
.....	Services.....	15
.....	Design and Consultancy Services	
	High Voltage Equipment review & FAT and procurement	17
	Energy Generation	27
	High Voltage Substation Engineering	33
	Transmission lines and Underground cables.....	39
	Protection and Distribution	43
	Buildings	49
	Hydrology and Chemicals	55
	...Management Services.....	57
	...Consultancy Services.....	63
	Research and Development	67
.....	Quality Management	71
	ISO Certification	73
	Technical Quality control	75
.....	Construction Management Services (CMS)	77
Preconstruction Activities	
Design Functions	
Construction Related Functions	
Material Functions	
Reporting	
Cost Engineering	
Scheduling	
Testing	
Administration	

.....	Company Facilities	83
	Work Environment	84
	Quality Process and Procedures	85
	360 Perspective	86
	ERP System	87
	IT Facilities	88
	Primavera	89
	Building Information Model	90
.....	List of Projects	95
.....	Organization Chart	137
.....	Our Clients	138
.....	List of Joint Venture Companies	141



WORDS FROM THE CEO

Prof. Abdelaal Mantawy



Our goal is to be one of the top branded engineering service providers in our field. Creativity, responsibility and ethics are our tools to achieve our commitment.

Since our start in 2001, we have demonstrated for both our clients and our employees that JAWDA is a reliable and a friendly workplace.

As we spend much of our lives at work, I believe it is my responsibility to ensure we all have an enjoyable and stimulating working relationship as possible.

It makes me happy when I see my colleagues at JAWDA competent and willing to share their knowledge, and simultaneously warm and friendly. On behalf of the board, we look forward to serving you and meeting your expectations.






Company Overview

JAWDA Engineering Consultants (JEC) is a consultant firm with a wide experience in design as well as consultancy services in the field of substations, power generation , transmission, and distribution systems including electrical, civil, architectural and mechanical works.

Since its establishment in 2001, JEC conducted services for about more than 200 engineering projects in the field of electrical substations, power generation, transmission, and distribution in the Middle East.

A person is standing on a large, dark rock in the foreground, looking out over a vast, hilly landscape at sunset. The sun is low on the horizon, creating a warm, golden glow across the sky and the land. The person is wearing a light-colored long-sleeved shirt and dark pants. The background shows rolling hills and fields under a clear sky with a few wispy clouds.

JEC has more than 120 highly qualified engineers, in different disciplines in our branches in: Saudi Arabia and Egypt

Our area of expertise in energy fields includes:

- High Voltage Equipment Review & FAT and Procurement
- Design Services.
- Consultancy Services.
- Researches and Development Services.
- Management Services.
- Qualified manpower Supply.

All our services can be provided independently or can be integrated as a part of an overall project package.





Mission

We are committed to:

- Exceed our customers' expectations by providing seamless quality engineering services that fully align with our customers' business objectives.

- We Provide value-for- money in all our services and products by optimizing our processes, investing in innovation and knowledge.



Vision

To be one of the top branded design and engineering services providers in the Middle East & Africa, with a diversified portfolio of innovative and environment-friendly engineering solutions.







Services

I- Design and Consultancy Services

- **High Voltage Equipment Review & FAT and Procurement**
- **Energy Generation**
- **High Voltage Substation Engineering**
- **Transmission lines and Underground Cables**
- **Protection and Distribution Services**
- **Buildings**
- **Hydrology and Chemicals**
- **Management Services**
- **Research and Development**





High Voltage Equipment Review & FAT and Procurement

1- H.V Equipment Design Review.

2- FAT Auditing

3- H.V Equipment Procurement


High Voltage Equipment Review/ FAT and Procurement

JAWDA has accomplished successfully all tasks related to equipment review, FAT and procurement for all voltage levels of substation(13.8, 33, 132 KV). These tasks cover the PTS, scope of work, prebid and postbid clarifications with coordination with suppliers.

1- H.V Equipment Design Review.

JAWDA has successfully completed the design review & evaluate the documents of GIS , LCC , protection and control received from supplier for approval of 132 & 33 KV substations.

JAWDA has been updating its own data base of contact details of all equipment from different supplier, related to EHV / HV / MV Equipment's .



Review all documents related to all voltage levels of substation, as follow:

A. Review of Base Design for:

1. 132 / 33 K.V. power transformer including technical offer.
2. 132/33 K.V. Power transformer protection panels including technical offer.
3. 132 K.V. GIS.
4. 132K.V SY. Panel including SY. Swing frame& technical offer.
5. 33K.V SY. Panel including SY. Swing frame& technical offer.
6. 33 K.V High impedance B.B.P.
7. 33K.V AIS panels' switchgear.
8. 132 K.V. LCC Schematic diagram panels including technical offer.
9. Auxiliary transformers. 33/0.415 K.V
10. 132 K.V. low impedance B.B. protection panels including technical offer.
11. 132 K.V. Bus coupler protection panels including technical offer.
12. 132 K.V. underground cable protection panels including technical offer.
13. AVR/RTCC control panel.



B. Review of Detailed Design for:

1. 132 / 33 K.V. power transformer.
2. 132 / 33 K.V. Power transformer protection panels.
3. 33 K.V. High impedance B.B.P (including Technical offer)
4. 132 K.V. underground cable protection panel.
5. 132 K.V. B.BP low impedance.
6. AVR / RTCC control panel.
7. Motor drive for power transformer TC panel.
8. Cooling system control cabinet of power transformer.
9. 33 K.V switchgear including, U/V and U/F Schemes.
10. 132 KV bus coupler protection panel.



C. Review for the following:

1. 132 GIS SLD and gas compartments.
2. 132 GIS layout including C.T/V.T arrangements.
3. Link Box documents.
4. Joints for underground cable.
5. X/R ratio as well as losses of power transformer.
6. Cable termination for GIS and transformer to release for manufactures.
7. Tariff panel metering
8. 132 KV LCC Panels including S.Y frame
9. 132 KV SY. Panel.
10. 33 KV SY. Panel, including S.Y frame.



2- FAT Auditing

JAWDA has been finalized & evaluated the FAT test procedures and ITP received from supplier before submission to client for approval and attend & witness the FAT at factory & issue shipment release report.





FAT Auditing has been done for the following

1. Power transformer ABB make 75/100 MVA.
2. Auxiliary transformer 500 KVA, UTEC make.
3. 132 LCC, ABB Make.
4. 132 GIS, ABB Make.
5. 33 KV Switchgear (AIS) ABB Make.
6. 132 KV cable feeders protection.
7. 132 KV BBP Panels.
8. 33 KV BBP Panels.
9. 132 KV Bus section & Bus coupler protection panels.
10. 132 KV power transformers panels.
11. 132 / 33 KV synchronizing panels.
12. 132 / 33 KV Annunciators Panels.
13. 132 KV Cable 1200mm² & 630 mm².
14. 132 KV cable termination, cable sealing end, insulated joints, through joints, bounding cable & link box, etc.
15. A lot of materials such as pumping PACU units, FF&FA.



3- H.V Equipment Procurement


JAWDA has worked as technical support of procurements & successfully issued RFQ for all equipment.

JAWDA has been completed & prepared purchase order (PO) including term conditions of PO of all equipment.

JAWDA has full experience about all conditions of PO, such as ex-work, payments via LC or progress invoice, Technical support during PO issued in light of standards, PTS & Scope of work.etc.

Jawda has a good experience for Technical meeting arrangement/preparing agenda with supplier for finalizing PO.





JAWDA successfully issued the RFQ, as well as P.O for the following equipment's

1. Auxiliary transformer 500 KVA.
2. NGR.
3. O.H Crane & Jib crane.
4. Communication system, such as PDH, SDH.
5. Protection & control.
6. ACDB & DCDB panels.
7. Battery & Battery charger.
8. RFQ & PO for testing and commissioning.
9. RFQ & PO for installation, cable pulling & cable termination.







Energy Generation

- Conventional Power Plant
- Renewable Energy:
 1. Solar Station
 2. Wind Farms
 3. Grid Studies



Conventional Power Plant

JEC with our International Partner (JEC & IP) offer comprehensive power plant design and engineering services, as well as preconstruction services to assist our clients in developing scope, cost, and schedule for project execution.

JEC&IP provide technical support regarding design of a new facility, upgrading of an existing facility or even modernization of an existing facility to achieve new governmental criteria. Our scope of services include;

1. Initial Definitive Study Planning and Implementation
2. Feasibility Studies
 - Plant throughput.
 - Plant location.
 - Onsite production of additives.
 - Availability of local supplies of materials.
3. Process Engineering
 - Testwork
 - Process design
 - Plant layout
 - Piping
 - Control Systems Engineering
4. Mechanical, Civil, Structural and Architectural Engineering
5. Electrical Engineering
6. Loss Prevention
7. Environmental and Permitting
8. Mining
9. Constructability and Logistics
10. Procurement
11. Development of Capital and Operating Cost
12. Development of the Project Schedule
13. Value Engineering and Risk Assessment
14. Project Execution Plan
15. Final Report



Renewable Energy

1- Solar Station

JEC with our International Partner (JEC & IP) provide an integrated service for all type of solar station including photovoltaic solar energy plant, solar thermal energy plant and concentrating power plants.

Our activities include with no limitation;

- Support customers for preparation of pre-bid technical documents
- Providing pre-design and engineering support for investors with financial model on feasibility on investments
- Selection of right technology
- Provide engineering advisory support to developers as owner's engineer's role to make sure on the design of power plants is the best.
- Provide complete detailed design & Engineering support to EPC
- Design support to all capacity of plants starting from small rooftop projects till Multi-Mega Watt solar power plants.

Detailed Engineering Scope

Design& Engineering services include every aspect of technical documentation:

- Site feasibility and energy estimation
- General solar plant layout
- PV simulation with possible option and PR calculations
- Shadow analysis of the complete plant using PV system
- DC string design (SLD), DC cable routing
- Detailed cable schedule with voltage drop calculations
- DC earthing drawing, Power loss calculations at each stage



Our quality services include:

- Site selection for solar power plants
- Solar resource review and preliminary assessment
- Solar data gathering, interpretation and analysis
- Modelling and annual energy yield estimates

Post contract engineering

We play an instrumental role in developing strategies, design and offering diverse range of services for Lenders / Owners / Developers / EPC Contractors to get seamless integration of their efforts and rewards.

- Detailed Engineering service for lenders / owners / developers / EPC
- Review engineering service for lenders / owners / developers / EPC
- Project co-ordination service for lenders / owners / developers / EPC

2- Wind Farms

JEC with our International Partner (JEC & IP) provide an integrated service for all type wind farms including land based wind farm and off shore wind. Our activities include without limitation;

Our activities for the Engineering and Design of wind farms include;

- Survey of the site
- Specifying the positions of wind turbines
- Determining the layout of the turbines
- The optimum position for the construction of substation/s.
- Connection between substations within the site with medium voltage cabling.
- Connection of Substation/s to Power Grid scope

3- Grid Studies

JEC is providing an integrated grid study services for both solar station and wind farms. Our activities include with no limitation;

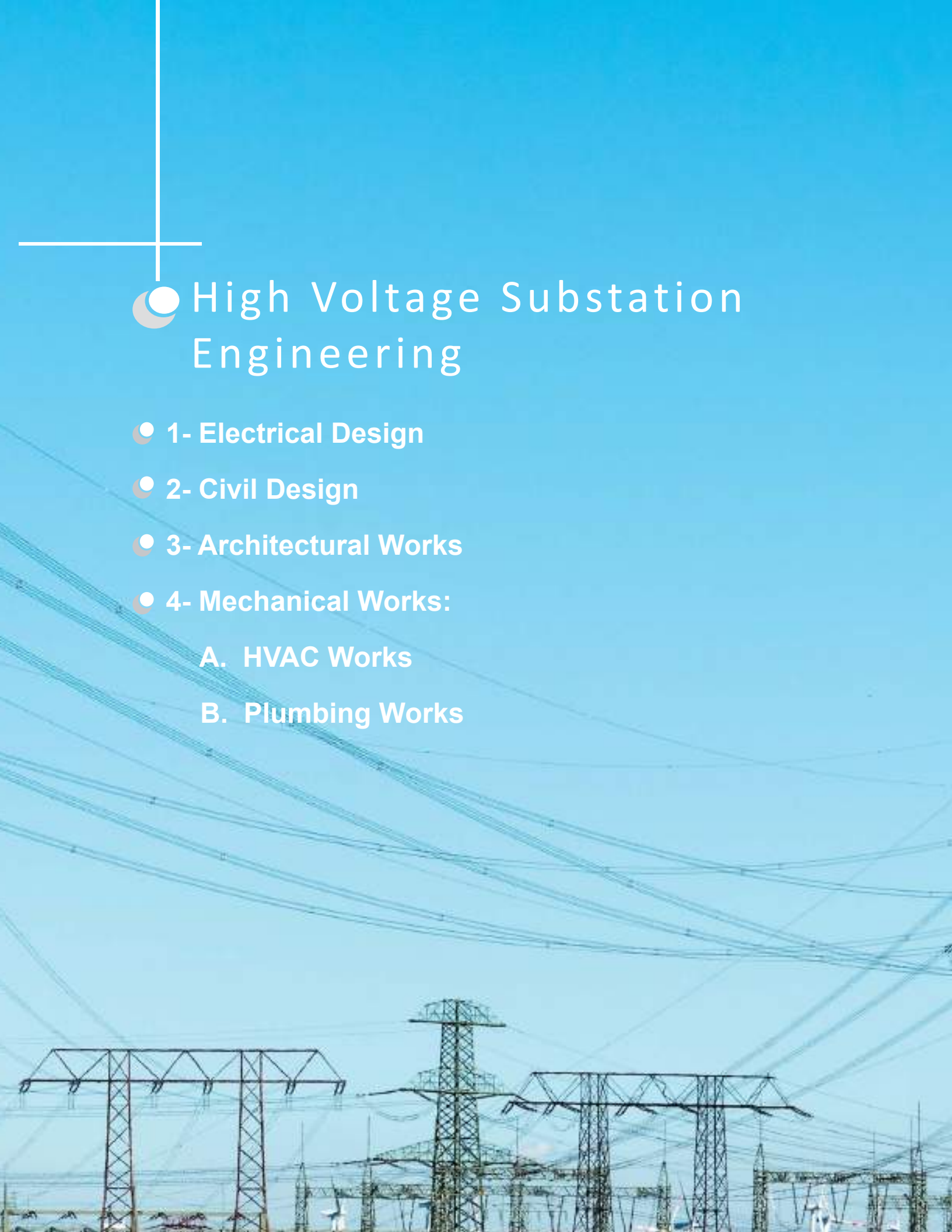
1. Grid Impact Static study
2. Grid Impact Dynamic Study, including:
 - Voltage Fluctuation
 - Active Power Control
 - Reactive Power Control
 - Fault Ride Through
3. Power Quality Study, including:
 - Flicker Calculations
 - Harmonics Calculations
 - Voltage Unbalance
4. Grid Protection Study, including:
 - Relays Coordination
 - Relays setting





● High Voltage Substation Engineering

- 1- Electrical Design
- 2- Civil Design
- 3- Architectural Works
- 4- Mechanical Works:
 - A. HVAC Works
 - B. Plumbing Works



JEC has successfully accomplished the engineering of a complete scope for more than 200 Electrical H.V substation projects.

Our scope of work often extends from layout, base and detailed designs to grounding, control, protection and schematics. It covers HV and MV panel designs as well as all phases are done to comply with specifications and optimal design. Scope of work of substation design may be summarized in the following tasks;

1- Electrical Design

A- Primary Design

- Grounding system design calculations.
- Duct banks, cable trenches layout, sections and details.
- Lightning (shielding) protection layout and details.
- Indoor/outdoor lighting layout details.
- Small power distribution layout details.
- Floor opening – switchgear control building.
- Lightning system design calculations.
- Operational SLD

B- Secondary Design

- CT/ VT sizing calculations.
- Relays setting calculations.
- Interlock Logic Diagram.
- Signal point list (Scada, FR, SOE , annunciation ,etc).
- Interlocking logic diagram.
- Low, MV HV voltage cables and breakers sizing calculations.
- Battery charger sizing calculations.
- AC/ DC SLD
- Relay and Metering One Line Diagram / Protection Logic Diagram.
- Auxiliary Transformer Sizing calculation.
- Cable Schedules and Interface drawings.
- SAS point list.
- Modification in protection and panels scheme

2- Civil Design

- Design calculation of switchgear GIS building.
- Design calculation of control building.
- Design calculation of switchgear building.
- Design calculation of power transformer fire wall foundation.
- Design calculations of fire fighting room.
- Design calculations of pump room.
- Design calculations of auxiliary transformer.
- Design calculations of capacitor bank foundation & shed details.
- Design calculation of oil tanks.
- Design calculations of boundary wall.
- Design calculation of water tank , septic tank & soak pit.
- Design of gantry & GIB foundation.
- Design calculations of steel support structure(ST, VT,.....etc.)
- Design calculations of duct bank , manhole and hand holes.
- Design calculation for HV switchgear foundation and steel support.
- Layout & details of foundation of columns for all types of building•
- Layout & details of(ground floor , root floor)framing plan.
- Staircase layout sections and rebar's details.
- Basement retaining wall opening and rebar details
- Coordination between civil & electrical & mechanical teams to be sure that all openings are reflected the same in all drawing.

3- Architectural Works

- Project layout design
- Primarily Architectural full design of substation building
- Architectural full project details
- Preparation of detailed BOQ.
- Project 3D modeling
- Project description and presentation
- Animation modeling and walkthrough
- Project coordination and review
- Accompaniment of client after project approval with any technical clarification required.
- Monitoring the project progress
- After approval follow up with site requirements
- As built drawing

4- Mechanical Works:

A- HVAC Works

- Preparation of design calculations for HVAC systems including Cooling Load, Heating Load, Ducts and Air Outlets Sizing calculations, External Static Pressure calculations, Pressurization calculations, Ventilation calculations, Fresh Air calculations, Smoke Exhaust System Calculations etc. using latest available software and standards.
- Preparation of HVAC design drawings at its conceptual and detailed stages.
- Issuing of complete package of design documents, including Ducting Layouts, Sections, Schedules of Equipment, Flow & Isometric Diagrams, Control Diagrams, and Design Calculation Report.
- Development and coordination of the duct routing and equipment layouts with other disciplines.
- Rectification of received comments and following the project until its final approval.
- Preparation of detailed BOQ.
- Accompaniment of client after project approval with any technical clarification required.





B- Plumbing Works

- Preparation of design calculations for Plumbing systems including Hydraulic calculations, Pump sizing, System pipe sizing for Domestic water system, Hot water system, Water Tanks capacity and drainage system using latest available soft wares and standards.
- Preparation of Plumbing design drawings.
- Issuing of complete package of design documents, including Water Supply and Drainage Piping Layouts, Sections, Schedules of Equipment, Flow & Isometric Diagrams and Design Calculation Report.
- Development and coordination of the water supply, drainage piping and equipment layouts with other disciplines.
- Rectification of received comments and following the project until its final approval.
- Preparation of detailed BOQ.
- Accompaniment of client after project approval with any technical clarification required.





Transmission Lines and Underground Cables.

- 1- Overhead Transmission Lines
- 2- Underground Cables

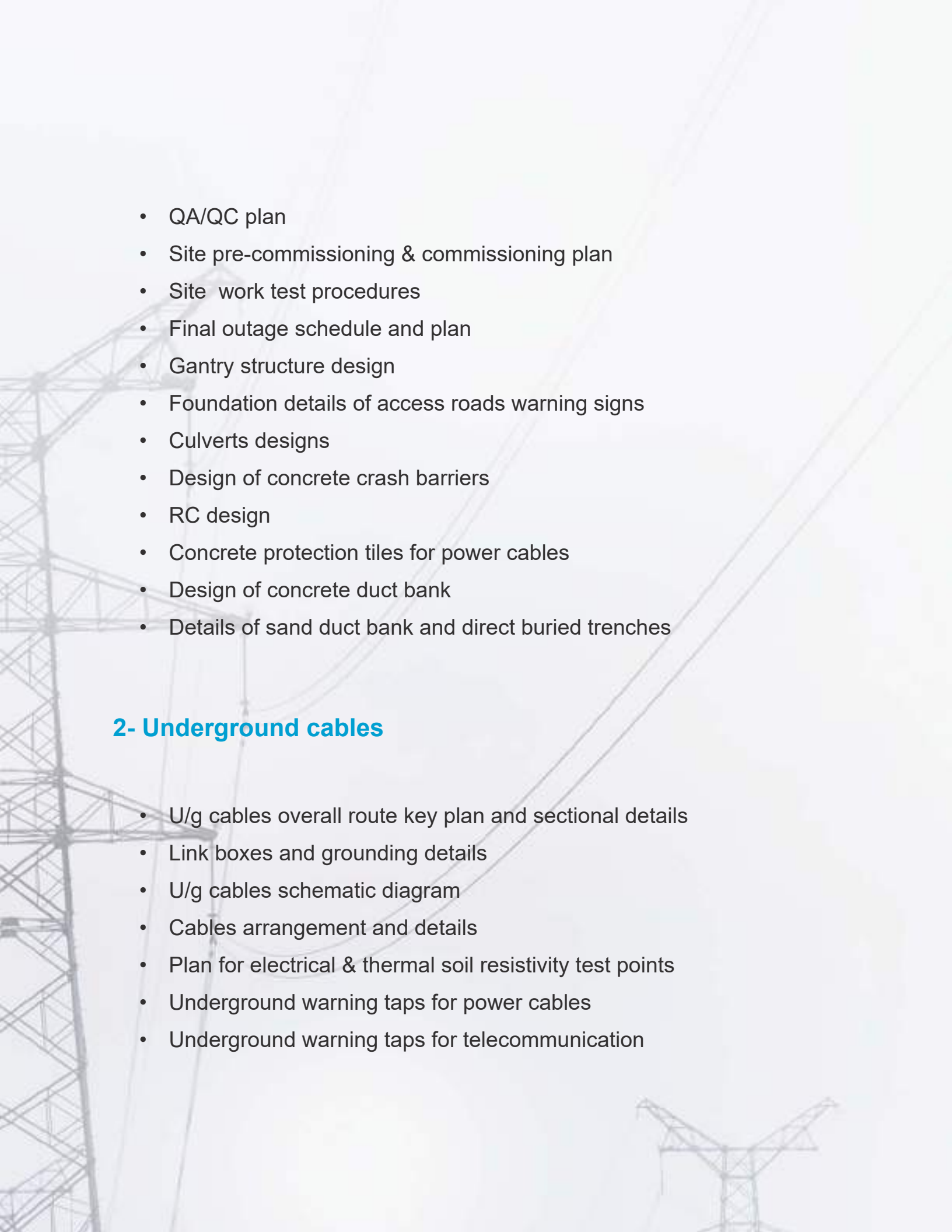


1- Overhead Transmission lines

We offer integrated services regarding long overhead, JEC is providing integrated design services including cables calculations, sizing, span, sag under IEC, IEEE standards.

Our services include:

- Conductor design
- Suspension tower design
- Angle tower type design
- Gantry structure type design
- Anti-climbing devices
- Cable sealing end (cse) steel structure& surge arrester
- Transmission line route map
- Plan and profile with spotted structure
- Conductor fittings & hardware details
- Insulator fittings
- Steel structure grounding details
- Warning signs
- Terminal compound layout
- Terminal compound grounding system design
- Boreholes location plan
- Sign board with electronic counter detail
- Geotechnical studies and soil investigation
- Structural design of foundation
- Site security plan

- 
- QA/QC plan
 - Site pre-commissioning & commissioning plan
 - Site work test procedures
 - Final outage schedule and plan
 - Gantry structure design
 - Foundation details of access roads warning signs
 - Culverts designs
 - Design of concrete crash barriers
 - RC design
 - Concrete protection tiles for power cables
 - Design of concrete duct bank
 - Details of sand duct bank and direct buried trenches

2- Underground cables

- U/g cables overall route key plan and sectional details
- Link boxes and grounding details
- U/g cables schematic diagram
- Cables arrangement and details
- Plan for electrical & thermal soil resistivity test points
- Underground warning taps for power cables
- Underground warning taps for telecommunication





Protection and Distribution Services



Protection and Distribution Services

JEC provides a Distribution & Protection design services for EHV / HV / MV System and our scope includes (but not limited) to the following:

1- Grid protection studies

- Relay setting calculation.
- Relays Coordination.
- LCC, Control & Protection Schematics and wiring diagram.
- Modification in protection and panel's scheme
- Relay and Metering One Line Diagram/Protection Logic Diagram.
- CT and VT Calculation and CT/ VT Interface wiring diagram.
- Signal List, Cable List and Terminal point list.
- Motor relays protection.
- Interlock and inter-trip logics and configuration.
- Protective relays software Setting printout output report.
- Setting, Testing and Commissioning for protection relays.

2- Distribution System design and Studies.

- Short Circuit and Load flow.
- Cable sizing and selection.
- Electrical duct bank heat calculation.
- Electrical equipment sizing calculation.
- DC load flow and battery sizing calculation.
- Lux calculations for indoor, street and outdoor area.
- Motor starting study.
- Arch flash Analysis.

3- Insulation Coordination Studies (ICS).

- Selection of Surge Arresters
- Determination of Surge Arrester Parameters
- Energy Capability of Surge Arresters.
- Overvoltage Study.
- Temporary overvoltage study
- Switching overvoltage's study
- Fast Transient Phenomena
- Modeling of Various Elements of the Network using PSCAD
- Probability Studies of back flashover
- Calculation of Maximum Current, for Direct Lightning
- Very Fast Transient Phenomena using PSCAD Modeling
- Ferro-Resonance study

4- Grid Impact Statics & Dynamics Studies.

- Voltage Fluctuation
- Active Power Control
- Reactive Power Control
- Fault Ride Through

5- Power Quality Studies.

- Voltage Flicker Calculations
- Harmonics Calculations
- Voltage Unbalance

6- Grounding System Studies.

- Grounding Conductor size
- Earthling philosophy and earthling transformer sizing.
- Number of ground rods.
- Complete ground system design for EHV / HV / MV / LV according to IEEE standard.
- Grid Resistance.
- Step and touch potentials.
- Ground potential rise (GPR)

7- Transient and Lightning Studies.

- Very Fast Transient Phenomena (very fast front).
- Fast Transient Phenomena (fast front).
- Temporary over voltages (low frequency).
- Switching over voltages (slow front).
- Energization/ Re-energization with and without surge arresters.
- Direct Strokes to Phase Conductors.
- Back Flash Over.
- Load rejection.
- Lightning (Shielding) protection layout and details.
- Lightning System design Calculation.

Tools & Software

- Power system and protection tools.
- Drawings design tools.
- Schematic and panels tools.
- OHTL sag and tension tools.
- Lux calculation tools.
- Finite element tools.
- Electrical transient's calculation tools.
- [ETAP](#) power station
- [SKM](#) power tools [DAPAR](#) and [CAPTOR](#)
- [EDSA](#)
- [PSCAD](#)
- Easy Power
- Doc Win-ABB product software
- EQUADIAL-Schneider product software
- CYMGrid
- PLS-CADD
- Sag 10

Drawings design

includes but not limited to:

- AutoCAD
- Micro-Station
- PDMS
- Revit





Buildings

- 1- Commercial and Administration buildings
- 2- Industrial Facilities
- 3- Hospitals and Health Facilities

1- Commercial and Administration Buildings

Our multidisciplinary team provides an integrated engineering service for the design of administration buildings including Architectural, structural, civil designs and MEP works.

Our engineering and design services incorporates; Engineering, planning, permitting services, schematic design, detailed design, preparation of tender documents, preparation of construction documents and site supervision as detailed;

- Assessment of site constraints, tie-in points, street conditions and preparation of infrastructure & utilities inception report.
- Study of the authority requirements and general civil defense conditions.
- Study and interpretation of soil investigation report and related structural engineering of foundation design, cement type etc...
- Evaluation and study of client requirements including model aspect, usage; and preparation of design philosophy.
- Preparation of site layout plan and 3D max alternatives for several potential design proposals for the administration building.
- Preparation of primary cost estimates “+/- 20%”
- Master plan development.
- Development of the schematic design and conceptual design for the selected proposal.
- Development of conceptual design plans regarding clearances and certificates from statutory authorities including Civil defense authority, District engineering authority and Mogama Asherya authority.
- Development of detailed architectural design documents including door/window schedules, fitting schedules, finishing schedules, color schemes, flooring patterns, ceiling plans, elevated floors, installation details etc.
- Development of BIM model to coordinate all engineering trades.
- Development of structural design calculation and seismic safety calculations for the selected Statical system.
- Development of Electrical design calculations and drawings including Lighting calculations, telephone layout, conduit layout, load calculations, fans, exhaust fans, sockets, earthing and Lightning protection system, cable sizing details and schedule etc...

- Design of audio-visual system, sound reinforcement system and internal communication system, Design of Firefighting system and related networks.
- Design of IT systems, drawings and layouts including access control system, Card reader system and related software, cables and conduits.
- Design of HVAC system including Heat load calculation, Ducting layout and size calculations, water chillers.
- Development of plumbing works including external & internal plumbing system, sewerage Piping System, potable water network, waste water piping system, storm water system, and connection of internal network with external utilities tie-in points.
- Development of Furniture drawings.
- Design of underground parking floors including detailed statical system and retaining walls, ventilation system, drainage system, maneuvering routes, entrance and exit routes, parking slots, signage etc...
- Landscape design including Hardscape, soft scape, modern irrigation network and related smart system.
- Design of fence, guard room, gates, illumination and signage etc...
- Development of tender documents including drawings, BOQ, specifications, preliminary time schedule and legal package.
- Development of detailed cost estimate.
- Development of value engineering alternatives.
- Management and selection of tender process.
- Evaluation of Contractor's proposal
- Selection and award of project for construction.
- Site supervision activities.
- Development / approval of shop drawings including, bar bending schedules and/or detailed reinforcement drawings.
- Approval of As-built drawings.
- Contractual Management during construction and claims management.



2- Industrial Facilities

JEC provides a comprehensive project documentation regarding the design of new industrial facility, extending production line or rehabilitation and modernization of an existing facility. Through the Lean manufacturing engineering process, our team extends their know-how to develop most efficient and sustainable designs for our clients. Our industrial engineering services is totally integrated to incorporate all the following;

- Feasibility study and strategic planning.
- EIA and socio-economic impact studies.
- Site analysis and related investigations.
- Master plan design
- Design and arrangement of production line facility
- Conducting space needs assessment
- Technical support to finalize funding documents
- Development of BIM model
- Line capacity analysis,
- Design of steel skeleton and related structures
- Design of auxiliary buildings and R.C buildings.
- Design of recycled water management system
- Design of unloading rail facility.
- Design of Heavy and light traffic flow, loading/unloading, packing, raw materials areas and related storage facilities.
- Production and Logistic Equipment Layout
- Process flow design including all production and warehousing equipment's,
- Maneuvering plan for blue collars, production workers
- Maneuvering plan for loading / unloading vehicles
- Utility connections “ tie-in connection to existing utilities”
- Design of an HSE plan and guidelines for staff working inside the production facility, in the landscape area and in auxiliary buildings.
- Preparation of architectural and construction details such as fixing details, installation details, joinery, inserts, cut-outs, pockets, standard details and other construction.

- Traffic study to design truck entrance and maneuvering route according technical specification and authority conditions.
- Preparation of permits drawings,
- Detailed design of Steel, structural, civil, Electrical, mechanical and architectural works
- Structural design of pipe racks,
- Design of soft and hardscape
- Preparation of tender documents
- Development of detailed cost estimate.
- Management and selection of tender process.
- Evaluation of Contractor's proposal
- Selection and award of project for construction.
- Site supervision activities.

3- Hospitals and Health Facilities

The development of any health facility incorporates the design of workflow, physical health components and pipelines, smart systems and emergency systems and classic engineering components as per the following;

- Conceptual design
- Design of Electrical networks;
- Water supply, (including fire fighting, irrigation, water treatment plants and water storage tanks/reservoirs
- Design of emergency systems
- Design of Waste water sewerage systems and storm water networks;
- Design of Vacuum Lines System
- Preparation of tender documents
- Management and selection of tender process.
- Evaluation of Contractor's proposal
- Selection and award of project for construction.
- Site supervision activities.





Hydrology and Chemicals

With the partnership with 'Hydro Consultants', JEC has broad experience, covering the different aspects of Surface Water Hydrology, Climate Change, and Environment, Water Supply projects, Hydraulic analysis, designs, modelling, wastewater projects and Designs including planning, preliminary design, detailed design, feasibility studies, detailed studies and designs, tendering documents, drawings and specifications, evaluation and assessment.

Our services includes:

- Environmental assessments, Environmental and Social Impact Assessments ESIA, Environmental Management Plans EMPs, Governmental Environmental Permitting from EEAA, Water Quality Monitoring programs, Water Quality Management.
- Planning / Design / tendering of water supply projects (data collection, water resources assessment, force mains, water treatment plants, water distribution networks, underground and elevated water tanks) for cities, villages and Touristic Resorts.
- Design of water supply projects (data collection, water resources assessment, force mains, water hammer, water distribution networks, underground and elevated water tanks including tender documents preparation and cost estimation).
- Design of wastewater projects (force mains, water hammer, pumping stations, sewage networks).
- Design of Irrigation pumping stations including earthworks and lining
- Hydraulic analysis of water networks using WATERCAD v. 8.0
- Hydraulic analysis of wastewater networks using SEWERCAD v. 8.0
- Water hammer Analysis for force main pipelines using HYTRAN 3.8.4
- Water Hammer Analysis for water networks using AFT impulse 4.0
- Design of Irrigation networks/Irrigation pumping stations including earthworks and lining
- Highway flood protection structures, flood calculation and storm water management
- Design of artificial lakes, lagoons, sedimentation ponds, mixing and pumping systems
- Design of Marine Breakwaters
- Comprehensive research experience both experimentally and numerically
- Teaching and training experience in the field of water supply/ wastewater/Environmental studies with excellent communication skills
- Extensive in the planning, design, modelling, evaluation and assessment of water and wastewater projects
- Substantial background in the technical aspects of water utility management
- Sediment Transport Research studies and applications, through numerical or experimental investigation.





Management Services

- 1- Management Consultancy
- 2- Project Management
- 3- ISO Preparation Service

1- Management Consultancy

JAWDA believe in its source of power consisting of high technical knowledge and ability to apply best practices that ensure high efficiency across disciplines within different industries.

JAWDA possesses highly qualified and experienced consulting team who introduce and implement modern management systems that help organizations improving its business practices and achieving its strategic objectives through a deep and detailed understanding and diagnosis of organizational challenges on the current business, process and people levels & identifying needed initiatives that would address all perspectives.

Services provided:

- Organizational Hierarchy Structure:

JAWDA consulting team offer full support in setting and defining organization hierarchy according to the company strategy and the industry best practices and linking the structure to strategic directions while translating the strategy into objectives and goals that are realistic and conformant with the strategy.

Since the company culture determines its directions and affect strategy, our consulting team assist clients identifying how the company measures on areas such as employee engagement, satisfaction, management/leadership effectiveness and working environment.

- Policies & Procedures:

Since at JAWDA we believe that each member in any organization should (say what he do and do what he say), we create policies and procedures that describe and document the business processes internal activities in the organization this include job profiles and framework for decision making that is designed primarily to assign authorities for key decisions.

- Performance Management System:

“What you cannot measure, you cannot manage” Peter Drucker

Performance Management system play a crucial role for organization , employee & manager, through a solid hands-on experience with performance management systems design and implementation, JAWDA Consulting team assist clients in guiding the organization toward the achievement of its objectives and goals & supporting business strategies through designing, introducing and implementing a process which emphasizes performance planning, two-way communication, regular performance feedback and employees' development.

As a part of the system implementation, the consulting team conduct workshops for raters on how to set KPIs, measurable objectives, avoiding evaluating errors and conducting effective performance review.

- Assessing Cultures, Leadership, Employees Engagement & Satisfaction

Since the company culture determines its directions and affect strategy, our consulting team assist clients identifying how the company measures on areas such as employee engagement, satisfaction, management/leadership effectiveness and working environment.



2- Project Management

Our Engineering service is professionally sustained in terms of project schedule, client budget and related value engineering scope.

Our project management items incorporates;

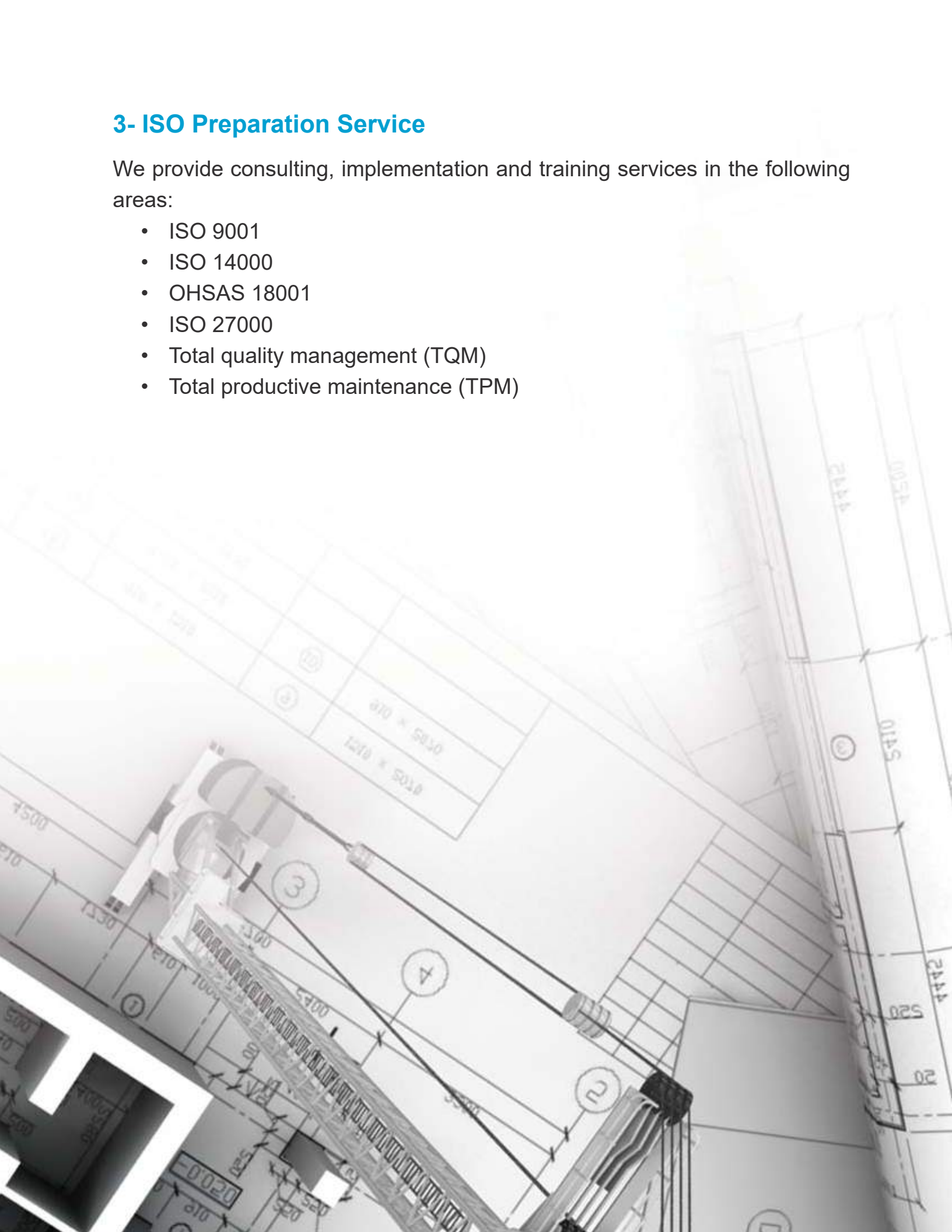
- Analysis of objectives.
- Cost planning (cost and value management).
- Programming by primavera.
- Change control.
- Progress measurement.
- Value of work done.
- Risk management.
- Interim payment and milestone payments.
- Mitigation planning and commissioning.
- Value management.



3- ISO Preparation Service

We provide consulting, implementation and training services in the following areas:

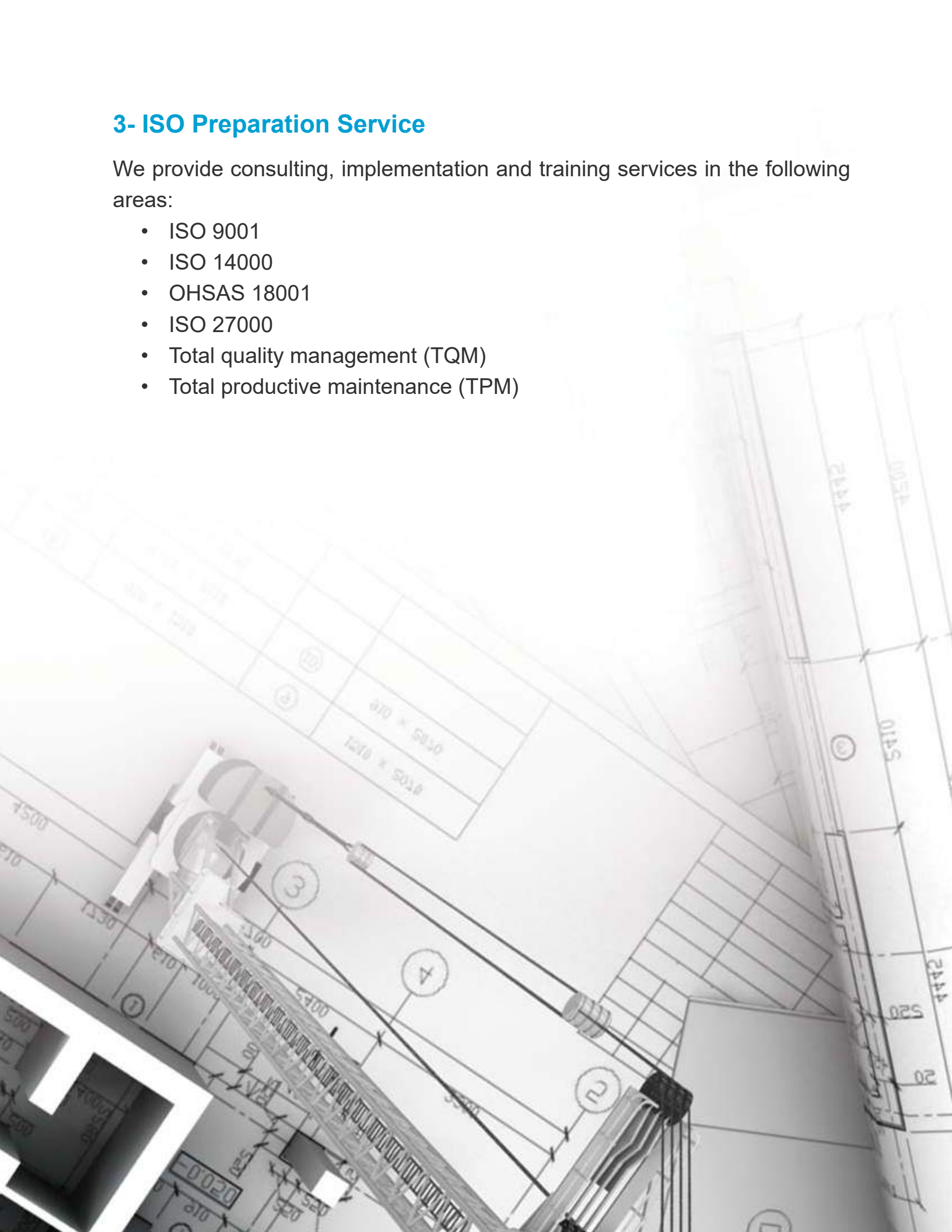
- ISO 9001
- ISO 14000
- OHSAS 18001
- ISO 27000
- Total quality management (TQM)
- Total productive maintenance (TPM)

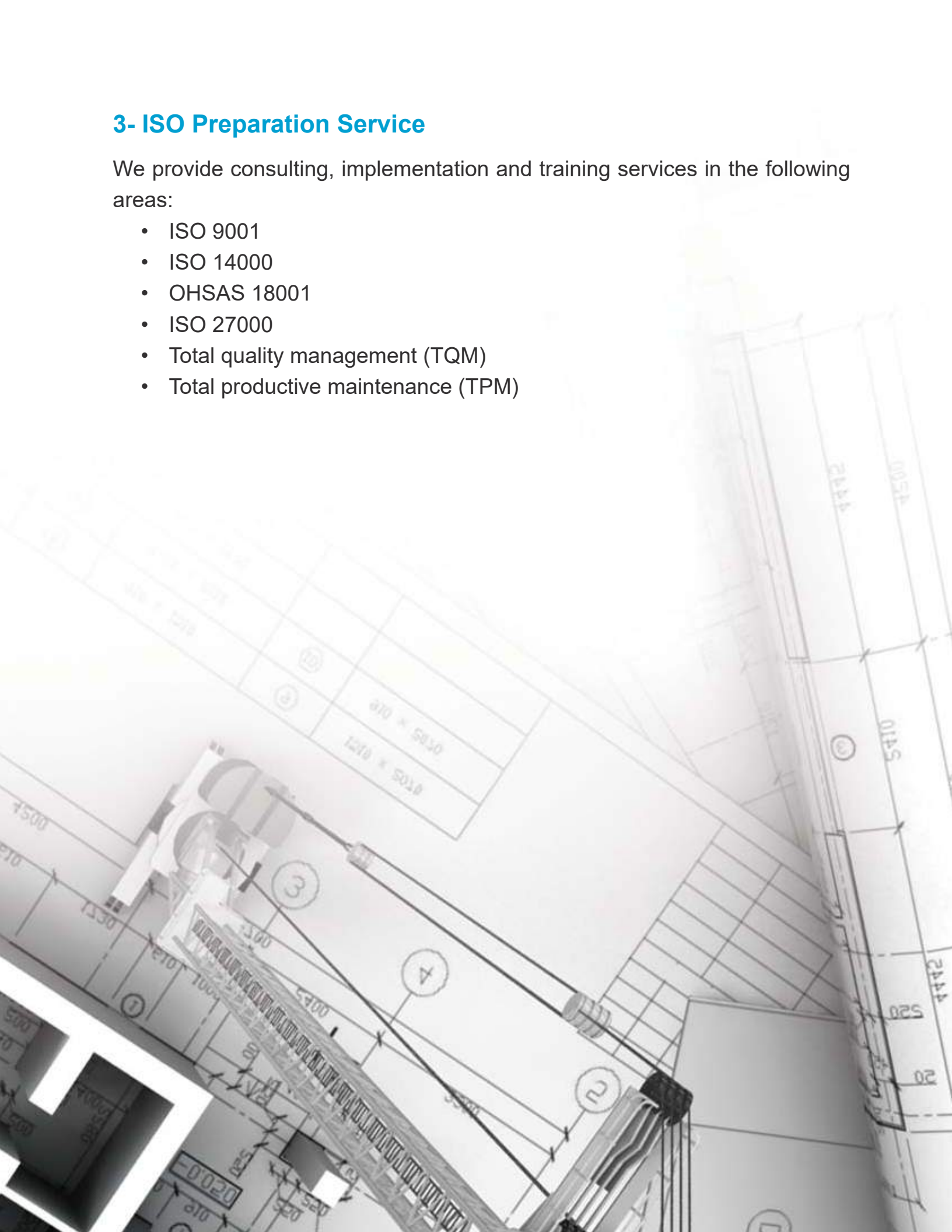


3- ISO Preparation Service

We provide consulting, implementation and training services in the following areas:

- ISO 9001
- ISO 14000
- OHSAS 18001
- ISO 27000
- Total quality management (TQM)
- Total productive maintenance (TPM)



- ### 3- ISO Preparation Service
- We provide consulting, implementation and training services in the following areas:
- ISO 9001
 - ISO 14000
 - OHSAS 18001
 - ISO 27000
 - Total quality management (TQM)
 - Total productive maintenance (TPM)
- 





● Consultancy Services

- 1- Mangement Consultancy
- 2- Electrical
- 3- Civil
- 4- Mechanical
- 5- Architecture

1- Management Consultancy

Jawda is providing an integrated projects management solution through our engineering departments that provide our clients with state-of-the-art solutions fully integrated, fully functional. Our engineering service incorporates;

2- Electrical

- Performance improvement of power systems
- Power flow and short circuit studies
- Protective devices and relays Coordination.
- Power factor correction studies
- Harmonics analysis and filters design.
- Voltage fluctuation (Flicker) and voltage dip studies.
- Complete power quality assessment studies.
- SVC's, FACTS and related reactive power control devices studies.
- Distributed generation and distribution system planning.
- Optimal planning for distribution, transmission and generation system.
- Unit commitment and economic dispatch.
- Transient stability analysis.
- Transient switching and surge analysis.
- Energy Management.
- Variable speed drives.
- MV Relay setting & coordination study.
- LV protection devices coordination study.
- Load flow study
- Grounding calculation
- Harmonic analysis
- Motor Starting study
- Transient stability analysis
- Arc flash analysis
- Short circuit calculation
- Insulation Coordination Study .

3- Civil

- Site work consultancy & site supervision Bill of quantities and specification for projects
- Soil investigation and soil improvement
- Foundations
- Scheduling and planning

4- Mechanical

Evaluation, project upgrading and supervision for existing Mechanical objects/sites.

- HVAC and Plumbing Systems design for the following applications :
 - Industrial
 - Commercial
 - Residential
- Firefighting systems.
- Surrounding MEP networks design.
- System of sewage and Oil.
- System of water pumping Stations
- Steam generating and hot water systems.

5- Architecture

- Reviewing Architectural materials.
- Preparation of Bill of Quantities (B.O.Q) for Materials Experience.
- Reviewing contractor drawing & transmittals.





Research and Development

Our team of scientists and research engineers provides unique solutions and in-depth system knowledge using self-implemented and ready-made software packages to provide a wide-range of power systems studies and research services with different capabilities ranging from planning to harmonic studies. Our research and development projects cover the following topics:

- Power systems and distribution systems planning studies
- Interconnection studies
- Unit commitment and generation scheduling
- Economic dispatch
- Protection Coordination studies
- Substation control system
- Load flow and short-circuit studies
- Transient and dynamic stability studies
- Electromagnetic transient simulations
- Insulation coordination studies
- System reliability studies.
- Distribution network operation studies
- Loss reduction studies
- Distributed generation studies
- Capacitor placement in distribution systems
- Energy audit
- Load management
- Harmonic and power quality studies
- Power factor improvement
- Load shedding schemes
- Other Studies

Sample of Research Projects:

Jawda research and development team has achieved the following projects

- A simulated annealing algorithm for fuzzy unit commitment problem, KFUPM, KSA, 2002.
- Evaluation and Analysis of electric interference problem with buried pipelines in Saudi Arabia", KSA, 2003.
- Optimal Planning of transmission systems", KACST, KSA, 2004.
- AIR Condition load modeling in Saudi Arabia", SAPIC, KSA, 2004.
- Improving the lighting performance and protection of electric power transmission lines in Saudi Arabia', KACST, KSA, 2005.
- The impact of wind turbine & photovoltaic systems on electrical grids.
- Power quality investigation to the impact of the newly emerged custom power technology in industrial plants, KSA, 2000.
- In situ detection of SF6 leaks in power systems using lasers, 2000.
- Practical testing and evaluation of high voltage cable insulation materials manufactured in Saudi Arabia, 2002.
- Evaluation and analysis of the electromagnetic interference problem with buried pipelines in Saudi Arabia, 2002.
- Lightning Monitoring and construction of ground flash density Maps in the kingdom of Saudi Arabia KACST, 2004.
- Investigation of thermal stresses and electrical degradation in cable joints and termination used in distribution systems KACST, 2007.



- 
- Heat Effects investigation in distribution transformers used in critical industrial processes KACST, 2009
 - Grounding and bonding procedures and requirements in distribution network Saudi electric co., 2005.
 - Inrush cold current in distribution network Saudi electric co., 2005.
 - Condition diagnostic of GIS, cable terminations and transformers using on-line condition diagnostic instruments Saudi Electric Co, 2005.
 - Harmonics identification and measurements of Kuwait Distribution system one year project 1994-1995
 - Design of the electrical distribution system for the new development area in the south valley” academy of scientific research, ministry of higher education, 2000.
 - Design of an optimal electrical distribution system of sienna”, scientific research academy, 2000.
 - Voltage security assessment of Qatar network: the voltage stability 2005-2006.
 - Pollution flashover of H.V insulators, ministry of electricity Egypt, 1981.
 - Pollution Flashover of H.V. insulators, 1982-1984 and 1987-1989.
 - Coordination and failure assessment of insulation in Egypt’s EHV Electric power system, 1980.
 - Insulation Level determination for transmission and distribution networks under different environmental conditions in Sinai, notional academy of science and technology, Egypt, 1998-2002.





● Quality Management

- 1- ISO Certification
- 2- Technical Quality Control

Jawda's staff is committed to delivering a quality professional service to our clients.

Jawda's quality policy is operating a Quality Management System (QMS), to ensure that all the necessary resources and training is provided to operate the system and that all personnel take an active role in implementing the quality management system.

The QMS internal project management system and continuing professional development w(CPD) protocol are managed in an integrated manner to achieve a quality service for our clients and to foster a process of continuous improvement of that service.



1- ISO Certification

Jawda has gained accreditation to ISO 9001:2008.

We are audited through OSS Middle East

Our certificate number is 221123A





Certificate of Registration

This is to certify that

JAWDA ENGINEERING CONSULTANT CO.

AT

**2264 ABO-NAMA BUILDING, 3RD FLOOR OFFICE 305,
AL-BALADIYA ST, AL-AZIZIA, JEDDAH 23334, PO BOX: 122320**

has been assessed and certified by Vatsin Certification as meeting the requirements of

ISO 9001 : 2015

(Quality Management System)

For the following activities

DESIGN & ENGINEERING SERVICES

IAF CODE - 34

Certificate No : VC23017954

To verify this certificate please visit at www.vatsincertification.com

Date of Initial Registration : 12-II-2024

Revision No. : 00

Re-Certification Due : 11-II-2027

1st Surveillance : 11-II-2025

2nd Surveillance : 11-II-2026

Certificate Expiry : 11-II-2027



**Authorised
Signatory**

VATSIN CERTIFICATION PRIVATE LIMITED

*Accredited by IAS (International Accreditation Services, Inc.)
(3868 Saturn Street, Suite 100, Brea, California 92821 United States of America)*

* Validity of the Certificate is subject to successful completion of surveillance audit on or before of due date, for case Surveillance audit is not allowed to be conducted, this certificate shall be suspended/cancelled.

* Certificate is the Property of VATSIN CERTIFICATION and shall be returned immediately when demanded.

* E-mail : info@vatsincertification.com Website : www.vatsincertification.com

2- Technical Quality Control

Quality doesn't just happen, it's a product of proper project management, a lack of quality control makes it impossible to guarantee quality in your projects. Using a quality checklist ensure quality is planned into your project. By implementing a Quality Checklist for all your projects, you can "check" each item off as you develop your project plan. Rest easy knowing that you have all of your bases covered

Creating a quality control inspection checklist should be among the first steps you take to develop an effective quality control program. A detailed checklist can save you a lot of trouble in the long run.

It can defend against sub-standard or non-conforming designs. Since this document is in writing, it can also serve as a handy reference not just for engineers on the design office floor, but also for if you have a disagreement with the client/ stakeholders about project standards.

Getting an absolutely perfect engineering design service run every single time is nearly impossible. But you can bring that goal closer to reality by preventing confusion and conveying expectations with a clear QC checklist.



The background of the slide is a photograph of an office desk. On the desk, there are several white binder rings, some papers, and a small potted plant in a red pot. A larger green plant is visible in the background. The text is overlaid on the left side of the image.

Construction Management Services (CMS)

1.1.1 Preconstruction Activities

1.1.2 Design Functions

**1.1.3 Construction Related
Functions**

1.1.4 Material Functions

1.1.5 Reporting

1.1.6 Cost Engineering

1.1.7 Scheduling

1.1.8 Testing

1.1.9 Administration

II - Construction Management Services (CMS)

Jawda had been prequalified with SEC for Consultancy Construction Management - Manpower Supply Works (Substation /Transmission Projects Business Line) in all Saudi region in year 2022 ,

Our Main goal to service our main Client Saudi electricity Company by providing high qualified & Trained Manpower (Project manager ,engineer, document controller ,secretary ,...etc.) which are suitable & Fit for below Tasks :

1.1.1 Preconstruction Activities

Establish project control procedures including, but not limited to, the following:

- a. Work Scheduling, Monitoring, Control and Co-ordination
- b. QA/QC Monitoring and Records Keeping
- c. Progress Evaluation, Recommendations to recover delays, if any, Billing and Invoice Presentation
- d. Safety and Loss Prevention

1.1.2 Design Functions

Review engineering and design and related documents including, but not limited to, the following:

- a. All CONSTRUCTION CONTRACTOR(S)' design submittals including detailed design calculation, structural design and analysis, construction drawings, installation details, etc.
- b. All "Material Proposals" and Purchase Orders submitted by CONSTRUCTION CONTRACTOR(S)

1.1.3 Construction Related Functions

Monitor and supervise the construction activities including, but not limited to the following:

- a. Monitoring of all tests and inspections of supplied materials and equipment, installation and construction
- b. Monitoring of CONSTRUCTION CONTRACTOR(S)' safety and loss prevention program
- c. Testing and commissioning assistance to COMPANY

1.1.4 Material Functions

Monitor and supervise the supply and delivery of materials and equipment for the PROJECT(S) including, but not limited to, the following:

- a. Inspection of all CONSTRUCTION CONTRACTOR(S)' incoming materials for damage and for compliance with CONSTRUCTION CONTRACT(S)' Technical Specifications.
- b. Monitoring the receipt, identification, unloading, transfer to storage and actual storage of all materials supplied by the CONSTRUCTION CONTRACTOR(S).
- c. Monitoring the flow and handling of materials from CONSTRUCTION CONTRACTOR(S)' lay down yard to the actual field location where required.
- d. Review of all material and equipment inspection reports, test reports, shipping reports, and delivery reports
- e. Review of CONSTRUCTION CONTRACTOR(S)' expediting reports
- f. Coordination with COMPANY Material Management Department and Power Transmission Department for identifying, cataloging and turning over the spare parts supplied by the CONSTRUCTION CONTRACTOR(S).

1.1.5 Reporting

Monitor the progress of the construction including, but not limited to, the following:

- a. Holding of weekly construction progress meetings with the CONSTRUCTION CONTRACTOR(S) to determine work progress, discuss problems, coordinate actions, plan and anticipate future requirements
- b. Review of cash flow expenditure forecast prepared by the CONSTRUCTION CONTRACTOR(S)
- c. Review of reports submitted by CONSTRUCTION CONTRACTOR(S).

1.1.6 Cost Engineering

Monitor the material supply and construction activities including, but not limited to, the following:

- a. **Monitoring of the material supply activities and construction activities and certification of types and quantities of materials and equipment delivered and installed**
- b. **Preparation of records and charts showing the progress of the work as performed by the CONSTRUCTION CONTRACTOR(S)**
- c. **Monitoring and regularly reporting of the status of progress payments**

1.1.7 Scheduling

Monitor the CONSTRUCTION CONTRACTOR(S)' Work Schedule.

1.1.8 Testing

Perform the below activities associated with testing of the PROJECT(S):

- a. Witness of all field-testing
- b. Review of all vendor test data

1.1.9 Administration

Perform the below administration of the CONSTRUCTION CONTRACT(S):

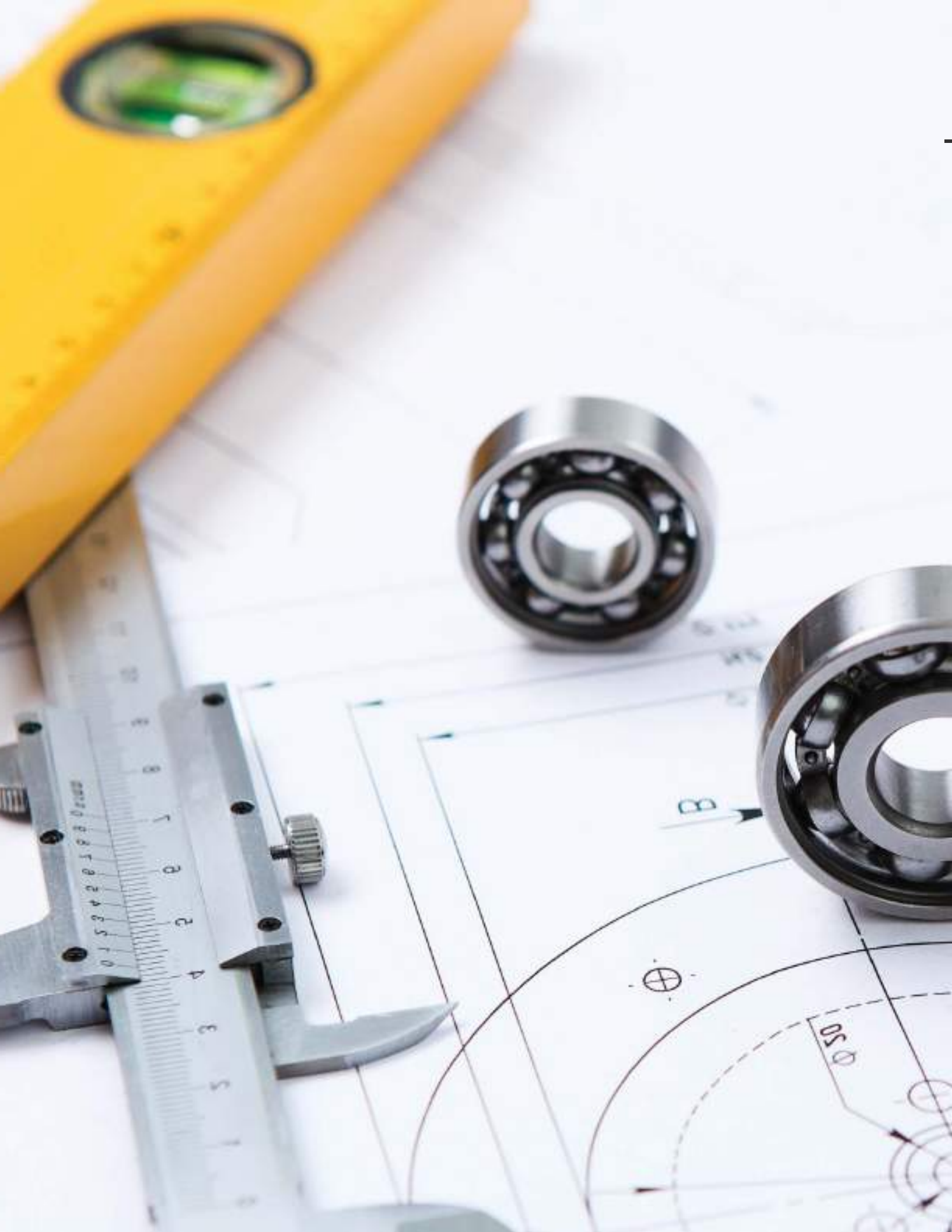
- a. Develop and implement Project Procedures
- b. Review the qualifications of the subcontractors proposed by the CONSTRUCTION CONTRACTOR(S)

Awarded project :

A- 4400019009-CONSTRUCTION MANAGEMENT SERVICES FOR EHV PROJECTS IN COA (PART-15) -2023

B- 4400020304-CONSTRUCTION MANAGEMENT SERVICES FOR TAIBAH IN WOA (PART 24) - 2024

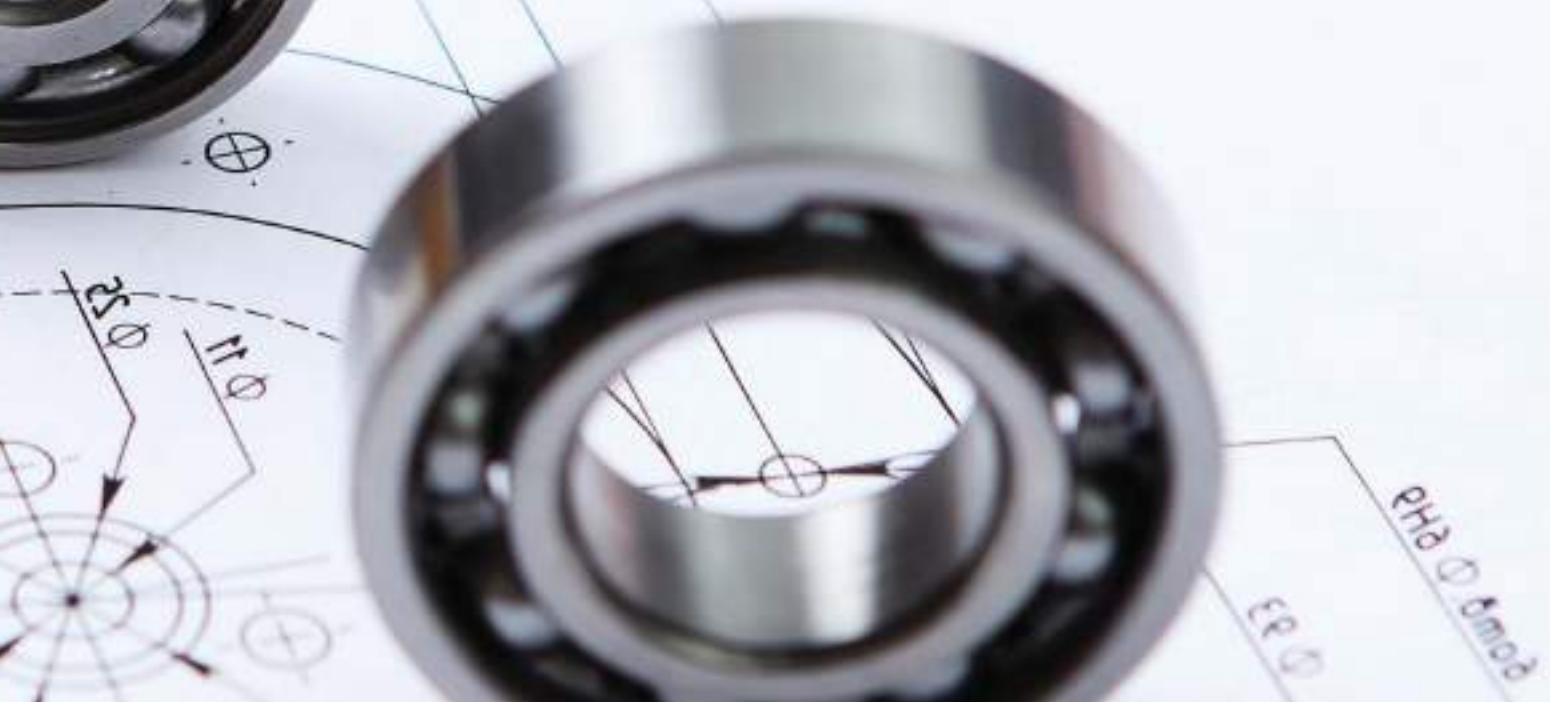
C- 4400021485-CONSTRUCTION MANAGEMENT SERVICES FOR HVAC OHTL & Converter Station - 2024





Company Facilities

- 1- Work Environment
- 2- Quality Process and Procedures
- 3- 360 Perspective
- 4- ERP System
- 5- IT Facilities
- 6- Primavera
- 7- BIM



1- Work Environment

Office employees spend majority of their time inside work stations and offices, where the physical environments influence their well-being and directly influence their work performance and productivity. In the workplace, it is often assumed that employees who are more satisfied with the psychological and physical environment are more likely to produce better outcomes. Collaboration techniques, flexibility with employees, issues solving methodology are among a long list of criteria that help JEC to implement optimum psychological environment to help employees focus on the service. JEC applies a special methodology to control productivity elements instead of just pushing around to get things done on time. Our methodology incorporates the management of the following three items;

- A. Employees Favorite environment
- B. Work load in terms of time management
- C. Engineering service and related quality

The early evaluation of those three items defines the expected quality of service to be provided under certain contract. Should the actual conditions extends a lower quality, our team leader(s) will immediately design an alternative work plan to ensure optimum quality of service by maintaining the most favorite working conditions for our employees, fair distribution of work and the best engineering service as a priority.

In terms of physical work conditions; Temperature, air quality, lighting and noise conditions in the office affect the work concentration and productivity. Numerous studies have consistently demonstrated that characteristics of the physical office environment can have a significant effect on behavior, perceptions and productivity of employees.

2- Quality Process and Procedures

In Jawda Engineering consultant we have made our Quality control (QC) handbook with set of procedures intended to ensure that our performed service adheres to a defined set of quality criteria or meets the requirements of our client.

Our project quality checklist handbook is a tool used to aid the project team in ensuring they consider all aspects of project and/or process quality. With a well-planned and repeatable quality management is to ensure the delivery of our design services which are acceptable to the customer based on some agreed upon standard of quality.

Our quality control inspection checklist serves two main purposes:

- A. Outlining quality standards and design requirements the client is expected to meet
- B. Providing objective criteria for inspecting the design service to ensure the client's expectations are being met

One of the less obvious benefits of collaborating with our client on developing a quality control inspection checklist is that we can improve our relationship with our client. Working on a checklist shows them we value their feedback. Additionally, clients may be able to suggest ideas to improve the work quality that might not have been considered.

This Check-List is a companion to the design review guidance plan at Jawda, with the help of a highly qualified engineering review team, we perform the design review and implement the design guide lines and work references.

Our handbook of our quality reference is under continuous development base, to keep pace with constant changes and new client's requests and demands.

3- 360 Perspective

- (Benefit all parties (is the main objective of our performance evaluation system, JAWDA evaluation system is not just a diagnostic tool, it's an integrated system that we use to create and grow a culture of feedback, and to sustainably grow JAWDA Staff.
- Staff is evaluated based on three criteria which are KPIs, Competencies & Punctuality.
- A 360-degree feedback is applied for all senior staff above a certain level (senior project managers & department heads) & supporting departments.
- In our 360-degree feedback system, an employee is evaluated from four other groups of sources: direct supervisor, peers at the same level, team members and other contacts within the company.





4- ERP System

Jawda system is more than an Enterprise resources planning system, it's an entire suite of service that actually cover management of design tasks, approval process, time management, work planning, cost control, quality control and other items into one standalone system.

What could usually goes in hours is done in a few minutes. This professional platform and cloud storage solutions help our engineering communicate and coordinate all design elements.

5- IT Facilities

Software Packages

Our engineers utilize the latest engineering software packages as follows:

- AutoCAD - including specialized toolsets 2022.
- Building_Design_Suite_Premium_2016
 - AutoCAD, Revit, 3D Max
- MicroStation PowerDraft CONNECT Edition V16
- Adobe Photoshop.
- STAAD.Pro CONNECT Edition x64 (SES) Update 9
- SAFE 12
- PC Column.V6
- Microsoft Office 365
- Saudi Lighting V.20.12.
- Cyme Grd 2021
- Elite Software Ductsize V6.1.2
- Elite Software CHVAC V8.2.66
- ETAP Power Station V-12.6.
- FTP (File Transfer Protocol) to facilitate data transfer to our clients in a fast and safe way.
- Lighting program (DIALUX V41302).

Work Flow and Database System

JEC's work flow system is implemented based on Oracle Data Based that ensures solving the challenging technical problems for our clients.

The system includes:

- Basic data information.
- User's accounts & user's rights.
- Drawing Control Sheet (DCS) & project life cycle.
- Internal communication.
- Attendance and timesheet.
- Reporting System.

Hardware Systems

- Color plotter printer.
- 100 desktop and laptop computers.
- 3 work center printers.
- Data server for all projects and work flow.
- Domain and mail exchange server
- Backup server.
- IP security camera security system.
- Fire alarm and 8 sensor system.



6- Primavera

The primavera professional services team can provide an end-to-end solution for project portfolio management success. We offer proven methodologies for accelerated software implementation. Our approach is simple. We'll start you off right with an implementation.

Approach designed to make sure you have the right technology and the right processes to maximize your primavera software investment.

We follow a proven methodology in delivering our consulting services, which includes:

- Needs analysis.
- Develop database structures.
- Develop project management best practices templates.
- Develop reports and forms.
- Assistance running a prototype of the developed solutions.
- Develop the procedures manual for running the solution.
- Core group training.
- Provide formal assessment.
- Assistance in running the completed solution.

7- Building Information Model (BIM)

Jawda Engineering Consultants has employed a BIM utility as part of our state-of-the-art plan to provide stakeholders with quality services through the most innovated platforms and materials. Building information modeling (BIM) is the state-of-the-art method to provide an innovative coordinated platform between Architects, Engineers and Construction team. BIM is a symptom of Building Information Modeling, it is the process of generating & managing building data during its life cycle. BIM uses three-dimensional, real-time & dynamic building modeling software to increase productivity in design & construction processes.

BIM Uses 3D models to capture, explore, and maintain consistent and coordinated planning, design, construction, and operational data during the lifecycle of the project;

- Links project planning to construction planning and simulation, as well as visualization during construction and digital fabrication
- Enhances project communication and collaboration among teams
- Create more accurate cost estimates
- Deliver more projects on time and within budget
- Extract information from BIM to pre-fabricate building components to improve project schedule, reduce cost, improve site safety, and produce greener construction practices by reducing material waste
- Reuse building models and data to better manage facility operations
- Analyze data-rich models to optimize resources and reduce waste and lower lifetime maintenance and operation costs
- Use intelligent 3D models to help manage space and perform spatial validation for tenant chargebacks

- Provides greater project insight for cost, schedule, and constructability
- Uses and shares the same consistent data whether you're at your desk or in the field
- Enables prompt response to change with processes that are smarter and faster
- BIM empower owner by Improves building quality, Significantly reduces building lifecycle costs, Better understand design projects from beginning to end, Optimizes operational efficiencies and increases occupancy and use rates• BIM combined with cost model enables accurate quantity survey of materials and components.

What do we need to achieve?

- Higher quality, more reliable design information
- Greater client certainty/predictability (time, cost, quality) earlier
- Better visualisation
- Better multi-disciplinary collaboration
- Quicker, more consistent and easier coordination of design documentation
- Earlier, accurate, complete procurement data ('smart' BOQs); elimination of waste and rework
- Better construction and project management ('build it once virtually, then build it for real')
- Better 'as-built', whole-life information for O&M
- Reduced Risk Factor during Construction
- Best Control of Clash Detections
- Increased Productivity
- Saving Time and faster delivery.
- Whole Life asset management
- Continual Improvement

Sample Project Done by Jawda Using BIM

Design & Construction of 132/13.8Kv Substation in Riyadh, Saudi Arabia
Indoor GIS type Substation arranged in a double-bus-single breaker configuration in AL AMARIYAH area,Riyadh.

The new Substation is fed at 132kV through two OHL/Underground circuits from another Substation The substation is equipped with Substation Automation System (SAS) and remotely controlled from the power Control Center (PCC) through SCADA system, Telecommunication system and gateway.

Project Includes:

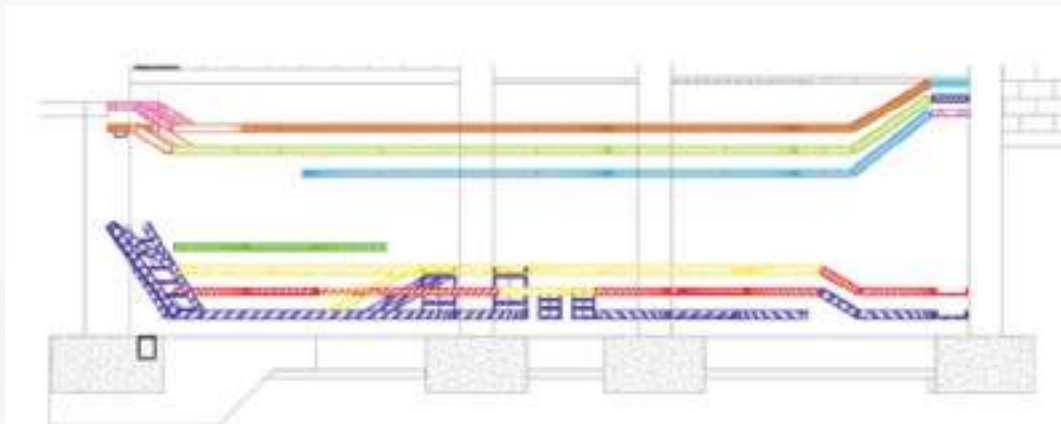
Participation of all design disciplines of the electrical substation matrix:

- Planning and Management
- Electrical Design Work
- MEP Design Work
- Structural Design Work
- Architectural Design and Work Presentations
- Project Cost Estimation
- Project Time Calculation
- Work Coordination
- Civil Design Scope

Construction Model



Electrical Scope



Mechanical Scope



Architectural Scope







List of Projects

- **A - Substations**
- **B - Transmission lines**
- **C - Underground Cables**
- **D- Protection and Distribution**
- **E - Power System & Network Studies**
- **F - High Voltage Equipment review/ FAT and Procurement**
- **G - Design Review**
- **H - Supervision Projects**
- **I - PV (Photo Voltaic)**
- **J - Projects related to the effect of electric lines on the pipeline**
- **K- MECHANICAL ELECTRICAL PLUMING(MEP)**
- **L - Buildings**
- **M - Hospitals**
- **N - AS BUILT**
- **O- Water and Chemicals**



A - Substations

No.	Name of Project	Location	Client	Project Type	Date
203	CONSTRUCTION OF ONE (1) NEW 132KV SUBSTATIONS (CULTURAL OASIS (OASIS)) TO DEVELOP POWER SUPPLY FOR ROYAL COMMISSION OF ALULA PROJECT	WOA. AL-ULA,	AL-GIHAZ	HV / SS	2025
202	CONSTRUCTION OF MAKKAH GATE HOUSING (MKGH) 110/13.8 KV S/S MAKKAH.	MAKKAH	CEPCO	HV /SS	2025
201	PS1& PS2 EXT MAPA & UGC	EOA	CEPCO	OHTL & Civil & LV & Secondary	2025

No.	Name of Project	Location	Client	Project Type	Date
200	ALKHARJ 8730 & 8717 SS 9067	COA	GE	EXTENSION-Secondary	2025
199	HAJER-2 380 KV IPP BSP	EOA	CEPCO	H.V S/S	2025
198	ROSHEN-2 BSP 110- 13.8KV	WOA JADDAH	CEPCO	HV. S/S	2025
197	RBG Power Station 380kV & 110kV LPOF UGC Circuit	SOA MADDINA	CEPCO	Extension	2025
196	Replacement Of 110KV LPOF UGCC FSL - MRS AND FSL-TTC	WOA JEDDAH	CEPCO	Extension	2025
195	JBQ TR01,02,03 MAKKAH power station & JARWAL SS, bw MPS & HVM	WOA MAKKAH	CEPCO	Extension	2025
194	CIRCUITS 8017 - 8155, 8018 - 8111 A,B, 8086 -9005B. COA	COA	CEPCO	Extension	2025
193	Replacement of LOPF UGC Portions in QURAYYAH#1 SS	EOA QURAYYAH	CEPCO	Extension	2025
192	UGC AZIZIYAH SWCC-NEW	EOA DHAHRAN CENTRAL A	CEPCO	Extension	2025
191	CONSTRUCTION OF UNITED CEMENT 110/13.8KV S/S.	WOA MAKKAH	Haif	HV S/S	2025
190	TADCO 13233KV SUBSTATION	WOA TABUK	HAIF	HV S/S	2025

No.	Name of Project	Location	Client	Project Type	Date
189	Reinforcement of Qurayat BSP SS	EOA Qurayat	Saudi Emar	Extension	2024
188	JUBAIL AIRPORT 34.5/13.8KV SS & UGC	EOA JUBAIL-2	CONET	M.V S/S	2024
187	CONSTRUCTION OF NEW HAJER-2 380KV BSP (QUR-RAYAH) AND 380KV UGC CONNECTIONS	EOA QURRAYAH	GE	EHV S/S	2024
186	CONSTRUCTION OF NEW 132-13.8kv SWCC S/S 8330	COA RIYADH	MAPA	HV S/S	2024
185	INSTALLATION of NEW STATCOM ± 300 MVAR at 132 KV LEVEL	SOA	AI-GHAZ	H.V S/S	2024
184	ROSHAN 110-13.8KV Substation & UGC IN MAKKAH	WOA MAKKAH	HAIF	H.V S/S	2024
183	POWER SUPPLY FOR RABIGH-4 PROJECT (SWPC/ RAB-4),	WOA - RABIGH, JEDDAH	GE	Extension	2024
182	CONSTRUCTION OF AL-SHARAF 132/13.8kv SUBSTATION	SOA ABHA	HAIF	HV S/S	2023
181	TIME SQUARE- PORT SAID PROJECT	,Egypt PORTSAID	CREODEVS	LV S/S	2023
180	CONSTRUCTION OF QIDDIYA PROJECT, 380/132 KV S/S#9078	COA RIYADH	TDP	EHV S/S	2023
179	CONSTRUCTION OF QIDDIYA PROJECT, 132/13.8kv S/S# 8373	COA- RIYADH	TDP	HV S/S	2023

No.	Name of Project	Location	Client	Project Type	Date
178	CONSTRUCTION OF QIDDIYA PROJECT, 132/13.8kV S/S# 8372	COA-RIYADH	TDP	HV S/S	2023
177	CONSTRUCTION OF QIDDIYA PROJECT, 132/13.8kV S/S# 8371	COA-RIYADH	TDP	HV S/S	2023
176	CONSTRUCTION OF QIDDIYA PROJECT, 132/13.8kV S/S# 8370 & EXTENSION OF 132KV GIS AT S/S # 8511	COA-RIYADH	TDP	HV S/S	2023
175	NEW SADEA 33-13.8KVSUB-STATION	EOA DAMMAM-	KFB Group	LV S/S	2023
174	Expansion of ARRASS PV 380/132kV BSP# 9095	COA. AR-RASS	ABC	EHV S/S	2023
173	132kV UGC SS 8005, 8074 & 8100, 8102 SUBSTATION	COA RIYADH	AL-NOWAISER CO	HVS/S	2022
172	ADEN 132KV SOLAR PLANT PROJECT	YEMEN ADEN	ZASCO	HV S/S	2022
171	CONSTRUCTION OF AL-HARIQ, 132/33kV SUBSTATION # 8724	COA AL HARIQ	TDP	HV S/S	2022
170	UMLUJJ HOUSING 110/13.8KV	WOA UMLUJJ	CEPCO	HV S/S	2022
169	RABIGH HOUSING 110/13.8KV	WOA Rabigh	CEPCO	HV S/S	2022

No.	Name of Project	Location	Client	Project Type	Date
168	Hayah Karemah –BEBA –Bani Sweif	Egypt Bani Sweif	TANTA MOTORS	Civil Design work for (Distribution Building / Transformers Kiosk and RMU	2022
167	Hayah Karemah –Komombo – Aswan	Egypt Aswan	TANTA MOTORS	Civil –Electrical-Arch-Me- chanical for Distribution Building / Transformers Kiosk and RMU	2022
166	GOUF-D 132 KV	COA AlGouf	AI-BABTIN (ABC)	HV S/S	2021
165	ABHA AIRPORT SOUTH 33 & 13.8KV	SOA ABHA	HAIF	HV S/S	2021
164	TANDAHA 33 &13.8KV	SOA TANDAHA	HAIF	MV S/S	2021
163	KHUDERAH - HAIF 33 & 13.8KV	SOA KHUDERAH	HAIF	MV S/S	2021
162	PORT FOR SEC AND ARAMCO PROJECT 132 & 13.8KV	KSA	GE	Extension	2021
161	NEMAR 132/13.8kv S/S (8375)	COA RIYADH	SEC	HV S/S	2021
160	Switching Station-1 BSP (9097) & REINFORCEMENT OF BSP 9020 (Bayan 380kv)	COA RIYADH	TDP	EHV S/S	2021
159	Replacment Of the 3 Existing Transformes at Zulfi Bsp# 9064	COA ZULFI	SSEM	HV S/S	2021
158	AR Rass PV 380/132 kv BSP# 9095	COA AR-RASS	SSEM	EHV S/S	2021

No.	Name of Project	Location	Client	Project Type	Date
157	Yanbu-4 Phase 380/110 kv BSP	WOA YANBU	GE	EHV S/S	2021
156	SAAD PV BSP 380/132 KV S/S #9094	COA RIYADH	Al Sharif (ASG)	EHV S/S	2021
155	Upgrading Protection Equipment in 132kv S/S	SOA ABHA	Al - Fanar	HV S/S	2021
154	Replacements & Reinforcement Jabal Al Noor 110/13.8 KV S/S	WOA MEKKAH	Ojaimi	HV S/S	2021
153	ABHA HOUSING 132/13.8KV S/S	SOA NG ASIR	HAIF	HV S/S	2021
152	(DHP-1) 132/13.8 KV S/S	SOA NG JIZAN	TDP	HV S/S	2021
151	AL-Malqaa 132/13.8 KV - (8278)	COA RIYADH	Al-Babatain	HV S/S	2020
150	AL-Aarid 132/13.8 KV - (8357) S/S	COA RIYADH	Al-Babatain	HV S/S	2020
149	Addition of Third Power Transformer (132/33/13.8 KV) at Muhayil	SOA JAZAN	JAL Co.	HV S/S	2020
148	Addition of Third Power Transformer (132/33/13.8 KV) at OUKDUD	SOA JAZAN	JAL Co.	HV S/S	2020
147	Rehabilitation and Restoration of Existing 110/13.8 KV New Air Force	WOA JEDDAH	NESMA	HV S/S	2020

No.	Name of Project	Location	Client	Project Type	Date
146	Rabigh 300MW Solar PV Power Plant Project 33/110kV Plant	Rabigh -KSA Marubeni & Al Jomaih	GE	EHV S/S	2020
145	JEC 380 bss (modification) AR-AMCO	SOA JAZAN	GE	Extension	2020
144	Ext Of Wadi Al Fara 380/110/33kv	WOA MADDINA	Siemens	EHV S/S	2020
143	D & R for Expansion of SWCC, PS2/PS3 380/13.8kv “ JR-WTS-PAC(C)-Station “	EOA DAMMAM-	LIMAK	EHV S/S	2020
142	Kom Ombo 220 / 33 KV AIS	Egypt Aswan	Mahindra Susten & ACWA Power	HV S/S	2020
141	Abu Arish 132/13.8 KV	SOA JIZAN	AL-HAIF	HV S/S	2020
140	Extension of 33KV SWGR at alUrfan	SOA ABHA	AI-HAIF	HV S/S	2020
139	Jubail-2 SWRO 230/13.8 KV	EOA JUBAIL-2	GE	Extension	2020
138	KING FAISAL COLLEGE 132/13.8KV S/S	COA QASSIM	Teading&Devel- opment Part- nership (TDP)	HV S/S	2020
137	Dammam Industrial City-3(DIC) 115/13.8 KV	EOA DAMMAM-	AI-BABTAIN (ABC)	HV S/S	2020
136	King Faisal Air Academy (8533)132 /13.8 KV in Majma'a	RIYADH-KSA / SEC -COA	TDP	HV S/S	2020

No.	Name of Project	Location	Client	Project Type	Date
135	11K Division Order “ Additional Engineering”	WOA YANBU	Siemens	HV S/S	2020
134	Pump station 380/132 kV -3 BSP (PS-SHQ)	SOA) SHUQAIQ	GE	EHV S/S	2019
133	Design For Transformer SWAP Project at SWCC Tahliya Plant	WOA JEDDAH	GE	HV S/S	2019
132	MODON ASFAN 110/13.8 KV S/S	WOA JEDDAH	NESMA	HV S/S	2019
131	Extension of SP1, SP2, SP3 380 BSP	EOA JUBAIL	GE	Extension	2019
130	SARRAR 2 115/33/13.8 KV S/S	EOA DAMMAM	AL-TOUKHI	EHV S/S	2019
129	West Damietta 500/220/22 KV	EGYPT DAMIETTA	KHARAFI NATIONAL	EHV S/S	2019
128	6th October Eastern Extension 220/22/22kv GIS	EGYPT 6TH OCTOBER	XD-EGEMAC	EHV S/S	2019
127	33/13.8kV substation # 7625 SAJIR	COA RIYADH	SSC-ARABIA	LV S/S	2018
126	KHORMAKSER 132KV – 33KV SUBSTATION - ADEN	YEMEN ADEN	ZASCO	HV S/S	2018

No.	Name of Project	Location	Client	Project Type	Date
124	Governmental Compound 132/13.8 KV S/S # 8196	COA RIYADH	AI-BABTAIN (ABC)	HV S/S	2018
123	Governmental Compound 132/13.8 KV S/S # 8197	COA RIYADH	AI-BABTAIN (ABC)	HV S/S	2018
122	Mansoura 132/33 Kv S/S .	Yemen MANSOURA	AL-ZAGHIR	HV S/S	2018
121	Hiswa Switching 132 /33 Kv S/S	Yemen HISWA	AL-ZAGHIR	HV S/S	2018
120	Wasia-lot 4 NWC	COA RIYADH	TAQAH CO.	MV S/S	2018
119	Al-Fara (FRA) 380/132/13.8kV BSP, and Integration of KKUC-1 132kV S/S	SOA ABHA	AL-GHAZ (AG)	EHV S/S	2018
118	(lots 2a, 2b,) in the interconnected 132/33 KV S/S 132 kv network	YEMEN ADEN	Ministry of Electricity and Energy / Public Electric-ity Corporation in ADEN	HV S/S	2018
117	DILM CITY 33/13.8KV S/S # 7737.	COA AL-KHARJ	SERVICE AND SOLUTIONS COMPANY (SSC)	MV S/S	2017
116	AL-KHARJ 33/13.8 KV # 7723-Reinforcement	"AL-KHARJ-KSA (NG- COA)"	ZAMIL PROJ-ECTS COMPA-NY	MV S/S	2017
115	PIC P7703 Project: (S/S 11K) 115/34.5/13.8 KV S/S	YANBU-KSA Royal Commis-sion	SIEMENS	HV S/S	2017

No.	Name of Project	Location	Client	Project Type	Date
114	Ext. of 10 J 380/115/34.5 KV S/S BSP	WOA YANBU	SIEMENS	EHV S/S	2017
113	(SS 111)34.5/13.8KV S/S	WOA YANBU	SIEMENS	HV S/S	2017
112	AI-NASEEM 132/13.8 KV S/S # 8223	COA RIYADH	AL-TOUKHI	HV S/S	2017
111	AI-NADEEM 132/13.8 KV S/S # 8288	COA RIYADH	AL-TOUKHI	HV S/S	2017
110	AI-SULY 132/13.8 KV S/S # 8234	COA RIYADH	AL-TOUKHI	HV S/S	2017
109	Iskan Al Amm Extension of 110/13.8 KV S/S	WOA MADDINA	NESMA	HV S/S	2017
108	Wasia-lot 6 NWC-REF S/S	COA RIYADH	TAQAH CO.	MV S/S	2017
107	Reinforcement of AL KHARJ 7703 33/13.8KV S/S	COA RIYADH	AL-HAIF	MV S/S	2017
106	YADMAH 33/13.8 kV S/S	SOA NAJRAN	AL-HAIF	MV S/S	2017
105	AI-THAR 33/13.8 KV S/S	SOA NAJRAN	AL- HAIF	MV S/S	2017
104	Replacement Of Distribution 33 KV Substations Communication System.	SOA ASIR	AL- HAIF	MV S/S	2017

No.	Name of Project	Location	Client	Project Type	Date
103	RAHWAH 33/13.8 KV S/S	SOA ASIR	AL- HAIF	MV S/S	2017
102	ASIR HOSPITAL 33/13.8KV S/S	SOA ASIR	AL-HAIF	MV S/S	2017
101	AL-SODAH 33/13.8KV S/S	SOA ASIR	AL-HAIF	MV S/S	2017
100	Ext. of satalite (SS 101) 34.5/13.8 KV S/S	WOA YANBU	SIEMENS	HV S/S	2017
99	King Khaled Hospital-2 110/13.8 S/S	WOA JEDDAH	SIEMENS	HV S/S	2017
98	3X20 MVA, 33/13.8KV S/S # 7625	COA DAWADMI	SERVICE AND SOLUTIONS COMPANY (SSC)	MV S/S	2017
97	Ext. of SHAROURA, (PP1) 132/33KV S/S	SOA ABHA	AI- GIHAZ (AG)	HV S/S	2016
96	NABAJ, Reinforcement 33/ 13.8 KV S/S	EOA TAPARJAL	TAQQAT	MV S/S	2016
95	MEQUOA, 33/13.8 KV S/S	EOA TAPARJAL	AL-HAIF	MV S/S	2016
94	Reinforcement of SHAROURA 132/33KV (PP2) S/S	SOA SHAROUR	AI- GIHAZ (AG)	HV S/S	2016
93	QUWAIZA 110/13.8 KV S/S	WOA JEDDAH	NESMA	HV S/S	2016
92	AL-SHALAL 110/13.8 KV S/S	WOA JEDDAH	NESMA	HV S/S	2016
91	Installation of 132/13.8kv trans- formers and Associated equip- ment at existing BSP S/S #9037	COA DAWADMI	AI-BABTIN (ABC)	HV S/S	2016

No.	Name of Project	Location	Client	Project Type	Date
90	AL-BADI, 132/33KV S/S #8767	COA KHARAJ	AI-BABTIN (ABC)	HV S/S	2016
89	AL-MUZAHMIAH Colleges Complex 132/13.8 KV S/S #8522 - Reinforcement	COA RIYADH	AI-BABTIN (ABC)	HV S/S	2016
88	Industrial area 132/13.8 KV S/S #8236	COA RIYADH	AI-BABTIN (ABC)	HV S/S	2016
87	DURMA S/S, 132/33 KV, 132/13.8 KV #8511	COA RIYADH	AI-BABTIN (ABC)	HV S/S	2016
86	BURAYDAH NORTH , 132/13.8 KV SS #8842	COA QASSIM	Trading & Development partnership (TDP)	HV S/S	2016
85	KING FAISAL, 132/13.8 KV S/S#8287	COA RIYADH	Trading & Development partnership (TDP)	HV S/S	2016
84	ALYARMOUK,132/13.8 KV S/S#8270	COA RIYADH	Trading & Development partnership (TDP)	HV S/S	2016
83	AI AMARIYAH,132/13.8 KV S/S #8120	COA RIYADH	Trading & Development partnership (TDP)	HV S/S	2016
82	RAINFORCEMENT OF: JAMMOM 110/33/13.8 KV , MAKHANORTH 380/110/13.8 KV BSP AND MPS 110 /13.8KV S/S	WOA MAKKAH	AL-GHAZ (AG)	EHV S/S	2016

No.	Name of Project	Location	Client	Project Type	Date
81	AL-JAWAD 110/13.8 KV S/S	WOA JEDDAH	NESMA	HV S/S	2016
80	AL JOHARA 110/13.8 KV S/S	WOA JEDDAH	NESMA	HV S/S	2016
79	YANBU NORTH-2, 110/13.8 KV S/S	WOA YANBU	NESMA	HV S/S	2014
78	EL-NAGA, 110/13.8 KV S/S - Extension	WOA MADINAH	NESMA	HV S/S	2014
77	YANBU AL-NAKHEEL , 110/33 KV S/S - Extension	WOA YANBU	NESMA	HV S/S	2014
76	NAJRAN AIR PORT, 132/33 KV S/S	SOA NAJRAN	AL-MASHARIQ (AMC)	HV S/S	2014
75	WAAD AL-SHAMAL, 132/13.8 KV S/S	COA ARAR-KSA	ETAC	HV S/S	2014
74	AL-QASSIM INDUSTRIAL CITY (QIC) BSP 132/33/13.8 KV S/S	COA AL-QASSIM	AL-MASHARIQ (AMC)	HV S/S	2014
73	QAIRWAN, 132/13.8 kV S/S # 8216	COA RIYADH	AL-MASHARIQ (AMC)	HV S/S	2014
72	MOKHTARAH, 132/33 /13.8 KV S/S	SOA JIZAN	AL-MASHARIQ (AMC)	HV S/S	2014
71	UQLAT AL-SUQUR, 132/33 KV S/S # 8806 - Reinforcement	COA AL-QASSIM	AL-MASHARIQ (AMC)	HV S/S	2014

No.	Name of Project	Location	Client	Project Type	Date
70	AL-NARJIS, 132/13.8 kV S/S # 8255	"RIYADH-KSA (NG-COA)"	AL-MASHARIQ (AMC)	HV S/S	2014
69	DHARAT LABAN, 132/13.8 kV S/S # 8116	"RIYADH-KSA (NG-COA)"	AL-MASHARIQ (AMC)	HV S/S	2014
68	AL-KHOZAMA, 132/33 KV S/S # 8171	"RIYADH-KSA (NG-COA)"	AL-MASHARIQ (AMC)	HV S/S	2014
67	RUFFEIDAH, 33KV S/S - Reinforcement	RUFFEIDAH-KSA (NG-SOA)	AL-GHAZ (AG)	MV S/S	2014
66	SUFFA , 110/13.8KV S/S - Reinforcement	"SUFFA-KSA (NG-SOA)"	AL-GHAZ (AG)	HV S/S	2014
65	JEDDAH SEA PORT, 110/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	NESMA	HV S/S	2014
64	BAB JEDDAH, 110/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	NESMA	HV S/S	2014
63	AL-MOTAMARAT, 110/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	AL-GHAZ (AG)	HV S/S	2013
62	GULF SALMAN, 110/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	AL-GHAZ (AG)	HV S/S	2013
61	MODON 2, 110/33/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	DELTA	HV S/S	2013
60	MASHAER BSP REINFORCEMENT 380/110/13.8 KV BSP - Interconnection	"MAKKAH-KSA (NG-WOA)"	DELTA	EHV S/S	2013

No.	Name of Project	Location	Client	Project Type	Date
59	JAMOOM EXTENTION 110/13.8 KV S/S	"MAKKAH-KSA (NG-WOA)"	DELTA	HV S/S	2013
58	AL-LAITH, 110/13.8 KV S/S	"AL-LAITH-KSA (NG-WOA)"	DELTA	HV S/S	2013
57	ADAM, 110/13.8 KV S/S	"ADAM-KSA (NG-WOA)"	DELTA	HV S/S	2013
56	TABOUK-11, 132/33 KV S/S	"TABOUK-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2013
55	AL-BARAKAH, 110/13.8 KV S/S	"MADINAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2013
54	AL-MAABDAH 110/13.8 KV S/S	"MAKKAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
53	ESHAR (SIFFA), 132/33 KV S/S	"NAJRAN-KSA (NG-SOA)"	AL-GIHAZ (AG)	HV S/S	2012
52	SHARURAH, 132/13.8 KV S/S	"SHARURAH-KSA (NG-SOA)"	AL-GIHAZ (AG)	HV S/S	2012
51	RADDAF , 110/13.8 KV S/S	"TAIF-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
50	KHYBER, 110/13.8 KV S/S - Ex-tension	"MADINAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
49	ICY, 110/13.8 KV S/S - Extension	"MADINAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
48	JAMOOM2, 110/13.8 KV S/S	"MAKKAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012

No.	Name of Project	Location	Client	Project Type	Date
47	DHUBA-2, 110/13.8 KV S/S	"DHUBA-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
46	AL-EYS, 110/13.8 KV S/S - Extension	"MADINAH-KSA (NG-WOA)"	ABB	HV S/S	2012
45	USHAIRAH, 110/13.8 KV S/S - Extension	"TAIF-KSA (NG-WOA)"	ABB	HV S/S	2012
44	HOUSING -2, 110/13.8 KV S/S	"JEDDAH-KSA (NG-WOA)"	ABB	HV S/S	2012
43	Extension of ZAHRA, 110 KV /13.8 KV S / S - Extension	"MADINAH-KSA (NG-WOA)"	AL-GIHAZ (AG)	HV S/S	2012
42	TATHLEETH, 132/33 KV S/S	"BISHA-KSA (NG-SOA)"	AL-GIHAZ (AG)	HV S/S	2012
41	BANI MALIK-2, 110/13.8 KV S/S	"JEDDAH-KSA / (NG-WOA)"	ABB	HV S/S	2012
40	JIZAN CPS2, 132/13.8 KV S/S -Reinforcement	"JIZAN-KSA (NG-SOA)"	ABB	HV S/S	2012
39	RABIGH CITY-2, 110/13.8 KV S/S	"RABIGH-KSA (NG-WOA)"	ABB	HV S/S	2012
38	KHAMIS SOUTH, 132/13.8 KV S/S	Khamis Mushait-KSA (NG-SOA)	ABB	HV S/S	2011
37	JIZAN MEDICAL CITY, 132/13.8 KV S/S	"JIZAN-KSA / (NG-SOA)"	ABB	HV S/S	2011
36	ROKBAH, 132/13.8 KV S/S	"NAJRAN-KSA / (NG-SOA)"	ABB	HV S/S	2011

No.	Name of Project	Location	Client	Project Type	Date
35	AL-JILLAH, 132/33 KV S/S # 8076 - Reinforcement	"AL-JILLAH-KSA (NG-COA)"	ABB	HV S/S	2011
34	HAIL, 132/13.8 KV S/S # 8907	"HAIL-KSA / (NG-COA)"	ABB	HV S/S	2011
33	BURAYDAH CENTER, 132 / 13.8 KV S/S #8832	"AL-QAS - SIM - KSA (NG - COA)"	ABB	HV S/S	2011
32	6 OCTOBER, CIVIL WORKS 66KV S/S	6 OCTOBER-EGY	EETC	HV S/S	2011
31	ISKAN, 132/33/13.8 KV S/S	"JIZAN - KSA (NG-SOA)"	AL-GHAZ (AG)	HV S/S	2011
30	TABOUK , 13.8/11 KV	"TABOUK-KSA / (NG-WOA)"	AL-GHAZ (AG)	MV S/S	2011
29	PSC, 110/13.8 KV S/S	"MAKKAH-KSA / (NG-WOA)"	ABB	HV S/S	2011
28	AL-RAYYAN, 132/13.8 KV S/S # 8173	"RIYADH-KSA / (NG-COA)"	ABB	HV S/S	2011
27	KING KHALED UNIVERSITY, 132/13.8 KV S/S	"ABHA-KSA (NG-SOA)"	AL-GHAZ (AG)	HV S/S	2010
26	TABOUK UNIVERSITY, 110/13.8 KV S/S	"TABOUK-KSA (NG-WOA)"	AL-GHAZ (AG)	MV S/S	2010
25	AL-RASS, 33/13.8 KV S/S	"AL-QASSIM-KSA / (NG-COA)"	AUVA	MV S/S	2010
24	TABOUK#10, 132/13.8 KV S/S	"TABOUK-KSA / (NG-WOA)"	AL-GHAZ (AG)	HV S/S	2009

No.	Name of Project	Location	Client	Project Type	Date
23	BANI NAJJAR, 110/13.8 KV S/S	NG-WOA MADINAH	AL-GIHAZ (AG)	HV S/S	2009
22	AL-ANDALUS, 110/13.8 KV S/S	NG-WOA JEDDAH	AL-GIHAZ (AG)	HV S/S	2009
21	ICY 5, 110/13.8 KV S/S	NG-WOA JEDDAH	AL-GIHAZ (AG)	HV S/S	2009
20	BADR, 110/13.8 KV S/S	NG-WOA MADINAH	AECC	HV S/S	2009
19	TABOUK 5B, 132/13.8 KV S/S	NG-WOA TABOUK	AL-GIHAZ (AG)	HV S/S	2009
18	AL-BIRK, 33KV S/S - Reinforcement	NG-SOA TOHAMA	AL-GIHAZ (AG)	MV S/S	2009
17	ICY 4, 110/13.8 KV S/S	NG-WOA JEDDAH	AL-GIHAZ (AG)	HV S/S	2008
16	AL-NUZLAH2, 110/13.8 KV S/S	NG-WOA JEDDAH	AL-GIHAZ (AG)	HV S/S	2008
15	HARAM2 & MADINAH NORTH, 110kv/13.8 KV S/S	NG-WOA MADINAH	AL-GIHAZ (AG)	HV S/S	2006
14	AL-QUMARIYAH, 110/13.8 KV	NG-WOA TAIF	AL-GIHAZ (AG)	HV S/S	2006
13	AL-HARAMAIN, 110/13.8 KV S/S	NG-WOA JEDDAH	AL-GIHAZ (AG)	HV S/S	2006
12	BILJURASHI, 132/13.8 KV S/S	NG-SOA BILJURASHI-	AL-GIHAZ (AG)	HV S/S	2006

No.	Name of Project	Location	Client	Project Type	Date
11	TABOUK 1&7, 132/13.8 KV S/S - Extention	NG-WOA TABOUK	AL-GIHAZ (AG)	HV S/S	2006
10	SABYA, 132/33/13.8 KV S/S - Extention	NG-SOA SABYA	AL-GIHAZ (AG)	HV S/S	2006
9	ZAFEER, 33/13.8 KV S/S - Reinforcement	NG-SOA ZAFEER	AL-GIHAZ (AG)	HV S/S	2006
8	KKAB-KHAMIS MISHAIT, 132/13.8 KV S/S-Reinforcement	NG-SOA Khamis Mushait-	AL-GIHAZ (AG)	HV S/S	2005
7	JIZAN CPS2, 132/33/13.8 KV S/S	NG-SOA JIZAN	AL-GIHAZ (AG)	HV S/S	2005
6	TANDAHA, 33/13.8 KV S/S	NG-SOA TANDAHA	AL-GIHAZ (AG)	MV S/S	2004
5	QILWAH, 132/13.8 KV S/S	NG-SOA QILWAH	AL-GIHAZ (AG)	HV S/S	2004
4	AQIQ, 132/33/13.8 KV S/S	NG-SOA AQIQ	AL-GIHAZ (AG)	HV S/S	2004
3	BAHA EAST, 132/33/13.8 KV S/S	NG-SOA "Baha	AL-Gihaz (AG)	HV S/S	2003
2	TANOUMA, 132/33/13.8 KV S/S	NG-SOA ANOUMA	AL-Gihaz (AG)	HV S/S	2003
1	BISHA SOUTH, 132/33/13.8 KV S/S	NG-SOA BISHA	AL-Gihaz (AG)	HV S/S	2002

B- Transmission Lines (OHTL)

No.	Name of Project	Location	Client	Project Type	Date
39	RBG Power Station	Madina South	CEPCO	OHTL & Civil & Secondary	2025
38	Replacement Of 110KV LPOF UGCC FSL	JEDDAH	CEPCO	OHTL & Civil & Secondary	2025
37	JBQ TR01,02,03 MAKKAH power station	WOA	CEPCO	OHTL & Civil & Secondary	2025
36	CIRCUITS 8017 - 8155, 8018 – 8111	COA	CEPCO	OHTL & Civil & Secondary	2025
35	LOPF UGC Portions in QURAYYAH	EOA	CEPCO	OHTL & Civil & Secondary	2025
34	UGC AZIZIYAH SWCC	EOA	CEPCO	OHTL & Civil & Secondary	2025
33	SPORTS BOULEVARD	COA	RIYAD Caple	OHTL & Civil	2025
32	Naiyrah 3 buildings	EOA	NG	OHTL & Civil & LV & Secondary	2025
31	CONSTRUCTION OF OHTL 110 KV FOR SUBSTATION 110/33/13.8 KV FOR NATIONAL AQUACULTURE GROUP (NAQUA)	Western Region	HAIF	OHTL	2025

No.	Name of Project	Location	Client	Project Type	Date
30	CONSTRUCTION OF 110 KV OHTL for UNITED CEMENT 110/13.8 KVSUBSTATION Within Liquid Displacement Program	Western Region	HAIF	OHTL	2025
29	Installation of 110 UGC for ARABIAN CEMENT 110/13.8 KV S/SWithin Liquid Displacement Program	Western Region	Al-Ojaimi	OHTL	2024
28	110-13.8 KV SS (KAEC-2 & KAEC-3) KING ABDULLAH ECONOMIC CITY	Western Region	CEPCO	OHTL	2024
27	REVISED CONNECTION REINFORCEMENT OF SHAMIYAH-1 & SHAMIYAH-2 SUBSTATIONS WITH MKC BSP (110KV UNDERGROUND CABLES PORTION)	Western Region	CEPCO	OHTL	2024
26	REPLACEMENT AND REROUTING OF 110KV UNDERGROUND CABLE CIRCUITS SEA SIDE SUBSTATION - KHALIDIYAH BSP (110KV UNDERGROUND CABLES PORTION)	Western Region	CEPCO	OHTL	2024
25	115 KV OHTL QAISUMAH PROJECT	Eastern Region	AL-HAIDER COMPANY	OHTL	2024
24	POWER SUPPLY TO ABU MAAN 115/13.8KV SUBSTATION (OHTL-PORION)	DAMMAM - KSA	CEPCO	OHTL	2024

No.	Name of Project	Location	Client	Project Type	Date
23	110kV OHTL between Al-Salam BSP Substation and Bawat Substation in Madinah-48KM	JEDDAH-KSA NG -WOA	Raissy	OHTL	2021
22	132kv OHTL from S/S 8720 to looping point 8721-8720	RIYADH-KSA SEC -COA	TDP	OHTL	2021
21	Misk Modification In tower & Gantry	Tabuk-KSA SEC -WOA	TDP	OHTL	2021
20	Al-Dawadmi Housing S/S 8610 With 132KV Network For The Review & Stamp	Dawadmi-KSA SEC-COA	TDP	OHTL	2021
19	132KV DC OHL FROM NEW KING FAISAL COLLEGE S/S 8533 UPTO BSP S/S 9064, IN MAJMA AREA	RIYADH-KSA SEC -COA	Trading & Development Partnership (TDP)	OHTL	2020
18	DHP-1 132/13.8kv S/S With Remote Ends	Jazan-KSA SEC -SOA	Trading & Development Partnership (TDP)	OHTL	2020
17	132KV DC OHTL Looping T/L To New DHP-1 132/13.8kv S/S P1& P2	Jazan-KSA SEC -SOA	Trading & Development Partnership (TDP)	OHTL	2020
16	132 KV OHTL QURAYYAT SS	QURAYYAT-KSA	AL-OSAIS	OHTL	2020
15	King Faisal College 132 KV DC OHTL, S/S(8533) up to BSP S/S 9064	Majma - KSA SEC - COA	Trading & Development Partnership (TDP)	OHTL	2020
14	Shifting of Tower of existing 132 kV d/C - 8096 -9023 Al Shahin project (3.2 KM)	Riyadh-KSA / (NG-COA)	PTC	OHTL	2020
13	RETROFITTING OF EXISTING 132KV OHL#9063-8522	Riyadh-KSA (SEC-COA)	PTC	OHTL	2019

No.	Name of Project	Location	Client	Project Type	Date
12	Loop in Loop out the existing SAZ-SHBS , MW-SHBS double circuit 380 KV OHTL	“Al Kharj - KSA (NG-COA)”	Al-BABTAIN (ABC)	OHTL	2018
11	Underground Transmission Line (UGTL) from KKUC-1 to FRA BSP	ABHA – KSA (SEC-SOA)	AL-GIHAZ (AG)	OHTL	2018
10	DC 132KV OHTS Line for NEW Al-Tawdihiah-2 S/S #8725	“Al Kharj - KSA (NG-COA)”	Al-BABTAIN (ABC)	OHTL	2017
9	OHTL BETWEEN S/S 8071 & S/S 8005	“Riyadh - KSA (SEC-COA)”	IBN OMAI-RAH Co. (IOC)	OHTL	2016
8	115 KV OHTI & U/G Cables	“Fadhili - KSA (SEC-EOA)”	ARAMCO	OHTL	2016
7	AL-BADI, 132/33KV S/S #8767, (connection of Al Badi s/s 8767 with 132kv network)	KHARAJ - KSA (NG-COA)	Al-BABTAIN (ABC)	OHTL	2016
6	380KV D/C OHTL ALWAJH- UMLUG	UMLUG-KSA SEC -WOA Wasela	WASELA	OHTL	2016
5	Connection of Al Badi S/S 8767 with 132 KV Network	“KHARAJ - KSA (NG-COA)”	Al-BABTAIN (ABC)	OHTL	2016
4	115KV DOUBLE CIRCUIT OHTL and UG Cable in Fadhili-2	FADHILI - KSA ARAMCO	Al-BABTAIN (ABC)	OHTL	2016
3	MADINA-DHUBA, 380 KV D/C OHTL	MADINAH-DHU BA-KSA (NG-WOA)	HYUNDAI ENGINEERING& CONSTRUCTION	OHTL	2015
2	132 KV OHL ,JIZAN INDUSTRIAL	“Jizan-KSA (SEC-SOA)”	AL-GIHAZ (AG)	OHTL	2009
1	SHOAIBA 110 KV OHL- between ICY5 S/S & Shoaiba S/S	“SHOAIBA-KSA (NG-WOA)”	AL-GIHAZ (AG)	OHTL	2008



C - Underground Cables

No.	Name of Project	Location	Client	Project Type	Date
47	INSTALLATION OF 110KV UGC FOR A NEW 110/13.8 KV SUBSTATION JAWHARAT AL AROS	WOA JEDDAH	RIYADH CAPLE	UGC	2025
46	ROSHEN-2 BSP 110- 13.8KV	WOA JADDAH	CEPCO	UGC	2025
45	CONSTRUCTION OF OHTL 110 KV FOR SUBSTATION 110/33/13.8 KV FOR NATIONAL AQUACULTURE GROUP (NAQUA)	WOA	HAIF	UGC	2025
44	CONSTRUCTION OF 110 KV OHTL for UNITED CEMENT 110/13.8 KV SUBSTATION Within Liquid Displacement Program	WOA	HAIF	UGC	2025
43	AL-FURSAN 2 HOUSING 132-13.8kv	RIYADH	DELTA	UGC	2024
42	JUBAIL AIRPORT 34.5/13.8KV SS & UGC	JUBAIL-2	CONET	UGC	2024
41	Installation of 110 UGC for ARABIAN CEMENT 110/13.8 KV S/S Within Liquid Displacement Program	WOA	Al-Ojaimi	UGC	2024
40	POWER SUPPLY FOR RABIGH-4 PROJECT (SWPCRAB-4)	WOA	Deep Dimension Contracting Company (DDCC)	Extensions & UGC	2024

No.	Name of Project	Location	Client	Project Type	Date
39	CONSTRUCTION OF 132kV U/G CABLE BETWEEN KHAMIS SOUTH AND KKAB IN ASIR REGION-SOA	SOA ASIR	Mastoura	UGC	2024
38	110-13.8 KV SS (KAEC-2 & KAEC-3) KING ABDULLAH ECONOMIC CITY	WOA	CEPCO	UGC	2024
37	132kV Cable between HUDUN SS & Najran Central SS	SOA	Smart UNION	UGC	2024
36	MEDICAL CITY (TIBA UNIVERSITY) 110-13.8KV SS & UGC	MADINAH City	DELTA	UGC	2024
35	REVISED CONNECTION REINFORCEMENT OF SHAMIYAH-1 & SHAMIYAH-2 SUBSTATIONS WITH MKC BSP (110KV UNDERGROUND CABLES PORTION)	WOA	CEPCO	UGC	2024
34	REPLACEMENT AND REROUTING OF 110KV UNDERGROUND CABLE CIRCUITS SEA SIDE SUBSTATION - KHALIDIYAH BSP (110KV UNDERGROUND CABLES PORTION)	JUBAIL	CEPCO	UGC	2024
33	ROSHAN 110-13.8KV Substation & UGC IN MAKKAH	Makkah City	HAIF	UGC	2024
32	115 KV UG MAHASSEN PROJECT	EOA	AL-HAIDER COMPANY	UGC	2024

No.	Name of Project	Location	Client	Project Type	Date
31	POWER SUPPLY TO TUWAIQ CASTING & FORGING FACILITY IN RIC (115KV UNDERGROUND CABLES PORTION)	JUBAIL	CEPCO	UGC	2024
30	CONNECTION PROJECT FOR 9062 -Al Arid	COA	OJAIMI	UGC	2023
29	SHQ-1 & 3 380-132kv Ext. & 132KV UGC SHQ-1 & 3 BSP	SOA	Haif	UGC	2023
28	MAKKAH PROJECTS	WOA OJAIMI	CEPCO	UGC	2023
27	CONSTRUCTION OF TWO (2) CKTS UG CABLES FROM NEW DIRIYAHGATE BSP #9082 TO EXISTING BSP #9034	COA RIYADH	CEPCO	UGC	2023
26	4 UG CABLES FORM 9020 TO NEW 9097 380kv	KSA	OJAIMI	UGC	2021
25	FOUR (4) CKTS UG CABLES FROM INTERFACE POINT TO SWITCHING S/S-1 9097	COA RIYADH	TDP	UGC	2021
24	4 UG CABLES FORM 9053 TO NEW 9098 380KV	KSA	TDP	UGC	2021
23	Connection Of ICY6 110kv S/S to Sanabel 110kv S/S	WOA JADDAH	Ojaimi	UGC	2021
22	Conversion Of 380 kv OHTL 9005 BSB TO 9020 BSB	COA RIYADH	CEPCO	UGC	2021

No.	Name of Project	Location	Client	Project Type	Date
21	13.8 kV MV UG CABLE BETWEEN LIFTING STATION	COA RIYADH	ZAMIL	UGC	2019
20	132 KV UGC-DC between FRA BSP & KKUC KKUC 1 SS (4.3 KM)	SOA ABHA	Al-GHAZ (AG)	UGC	2018
19	Construction of 132 KV underground cable, 10 km.	YEMEN	Ministry of Electricity and Energy Public Electricity Corporation in ADEN	UGC	2018
18	33 KV UGC-DC between new 7625 33/13.8 KV SS & 8810 132/33 KV SS (5.5 KM)	COA SAJIR	Service and Solution Company (SSC)	UGC	2018
17	110kV U/G -DC Cables for Sarfi Substation in Jeddah	WOA JEDDAH	Nesma	UGC	2017
16	33 KV UGC- DC between new 7737 33/13.8 KV SS & 8703 132/33 KV SS (3.2 KM)	COA KHARJ	Service and Solution Company (SSC)	UGC	2017
15	33 KV UGC-DC between new 7723 33/13.8 KV SS & 8069 132/33 KV SS (8.5 KM)	COA KHARJ	ZAMIL	UGC	2017
14	380KV Double CKT U/G Cable from Airport Housing BSP# 9050 To PNUA BSP 9024 (PTS #13CC374)	COA RIYADH	Trading & Development Partnership (TDP)	UGC	2017
13	115 KV OHTI & U/G Cables	EOA FADHILI	ARAMCO	UGC	2016
12	380KV UGC/DC between Exiting Al-NAFAL BSP (9008) & ALMURSALAT BSP (9012)	COA RIYADH	SSEM	UGC	2016

No.	Name of Project	Location	Client	Project Type	Date
11	Connection of AL-REMAL S/S 9046 with 132kv Network	COA RIYADH	SSEM	UGC	2016
10	Connection of INDUSTRIAL Area S/S 8236 with 132Kv Network	COA RIYADH	SSEM	UGC	2016
9	Connection of QURTUBA Riyadh Metro BSP#9053 with 132KV Network	COA RIYADH	SSEM	UGC	2016
8	Connection of AL-NADA S/S #8220 with 132KV Network	COA RIYADH	SSEM	UGC	2016
7	Connection of AL-MORABA S/S #8187 with 132KV Network	COA RIYADH	SSEM	UGC	2016
6	Connection of SALAH ALDEEN S/S #8219 with 132KV Network	COA RIYADH	SSEM	UGC	2016
5	380KV between BSP (9044) & BSP (9013)	COA RIYADH	SSEM	UGC	2016
4	380KV for CONNECTING JFH-HP2 (ckt-II & JFH-SNL (ckt-1, 2 & 3)	WOA JEDDAH	SSEM	UGC	2016
3	380KV between EXISTING AL NAFAL BSP (9008) & AL MURSALAT BSP (9012)	COA RIYADH	SSEM	UGC	2016
2	380KV UGC CABLES between JAH-HHR2 (Ckt-1&2) and JAH-JNE (Ckt-1&2)	WOA JEDDAH	IBN Omairah Co. (IOC)	UGC	2016
1	115KV DOUBLE CIRCUIT OHTL and UG Cable in Fadhili-2	FADHILI - KSA ARAMCO	AL-BABTAIN (ABC)	UGC	2016

D - Protection and Distribution

No.	Name of Project	Location	Client	Project Type	Date
28	HAIL SS BESS SYSTEM	HAIL	ALFANAR	BESS	2025
27	REPLACEMENT AND REROUTING OF 110KV UNDERGROUND CABLE CIRCUIT BETWEEN ABHOUR SOUTH SUBSTATION - NAHDAH SUBSTATION	West Region	OJAIMI	Protection modifications	2024
26	Installation of Power Transformer for Jazan Medical City	South Region	Nesma	Protection modifications	2024
25	EXTENSION OF MV SWGR AT 110-13.8 kV TAIBA UNIVERSITY	Western Region	Nesma	Protection modifications	2024
24	REVISED CONNECTION REINFORCEMENT OF SHAMIYAH-1 & SHAMIYAH-2 SUBSTATIONS WITH MKC BSP (110KV UNDERGROUND CABLES PORTION)	Western Region	CEPCO	Protection modifications	2024
23	REPLACEMENT AND REROUTING OF 110KV UNDERGROUND CABLE CIRCUITS SEA SIDE SUBSTATION - KHALIDIYAH BSP (110KV UNDERGROUND CABLES PORTION)	Western Region	CEPCO	Protection modifications	2024

No.	Name of Project	Location	Client	Project Type	Date
22	Replacements & Reinforcement Jabal Al Noor 110/13.8 KV S/S	Mekkah-KSA SEC-WOA	Ojaimi	HV S/S	2021
21	Upgrading Protection Equipment in 132kv S/S	Abha-KSA SEC -SOA	Al - Fanar	HV S/S	2021
20	Shoaiba Relays Setting	JEDDAH-KSA SWCC	Al-FANAR Co.	STUDIES	2020
19	ICS (Insulation Coordination Study) For Safaniyah Debottleneck Onshore Plants	Safaniyah KSA Aramco	GE	PV / Engineering & Studies	2020
18	ICS (Insulation Coordination Study) for Zuluf Plants	Zuluf - KSA Aramco	GE	PV / Engineering & Studies	2020
17	Insulation Coordination Study SFNY TP-21	KSA	GE End client : Aramco	PV / Engineering & Studies	2019
16	AL-KHARJ 33/13.8 KV # 7723- Reinforcement	"AL-KHARJ - KSA (NG- COA)"	ZAMIL PROJECTS COMPANY	MV S/S	2017
15	Reinforcement of AL KHARJ 7703 33/13.8KV S/S	"Riyadh-KSA / (NG-SOA)"	AL-HAIF	MV S/S	2017
14	INSULATION COORDINATION STUDY - FADHILI Gas Processing Plant - PR 4032610.	KSA	GE End client : Aramco	PV / Engineering & Studies	2016
13	NABAJ, Reinforcement 33/ 13.8 KV S/S	"Taparjal -KSA (NG-EOA)"	TAQQAT	MV S/S	2016
12	Reinforcement of SHAROURA 132/33KV (PP2) S/S	SHAROURA - KSA (NG-SOA)"	Al- GIHAZ (AG)	HV S/S	2016

No.	Name of Project	Location	Client	Project Type	Date
11	AL-MUZAHMIAH Colleges Complex 132/13.8 KV S/S #8522 - Reinforcement	"Riyadh - KSA (NG-COA)"	AI-BABTIN (ABC)	HV S/S	2016
10	UQLAT AL-SUQUR, 132/33 KV S/S # 8806 - Reinforcement	"AL-QASSIM-KSA (NG-COA)"	AL- MASHARIQ (AMC)	HV S/S	2014
9	RUFFEIDAH, 33KV S/S - Rein- forcement	RUFFEIDAH-KSA (NG-SOA)	AL-GIHAZ (AG)	MV S/S	2014
8	SUFFA , 110/13.8KV S/S - Rein- forcement	"SUFFA-KSA (NG-SOA)"	AL-GIHAZ (AG)	HV S/S	2014
7	MASHAER BSP REINFORCE- MENT 380/110/13.8 KV BSP - Interconnection	"MAKKAH-KSA (NG-WOA)"	DELTA	EHV S/S	2013
6	JIZAN CPS2, 132/13.8 KV S/S -Re- inforcement	"JIZAN-KSA (NG-SOA)"	ABB	HV S/S	2012
5	AMRS - AUTOMATIC METER READING SYSTEM NO. 288 S/S IN Western & southern Area	"KSA(NG - WOA / SOA)"	AUVA	Protection Work	2011
4	AL-JILLAH, 132/33 KV S/S # 8076 - Reinforcement	"AL-JILLAH-KSA (NG-COA)"	ABB	HV S/S	2011
3	AL-BIRK, 33KV S/S - Reinforce- ment	"TOHAMA-KSA / (NG-SOA)"	AL-GIHAZ (AG)	MV S/S	2009
2	ZAFEER, 33/13.8 KV S/S - Rein- forcement	"ZAFEER-KSA (NG-SOA)"	AL-GIHAZ (AG)	HV S/S	2006
1	KKAB-KHAMIS MISHAIT, 132/13.8 KV S/S-Reinforcement	Khamis Mushait- KSA (NG-SOA)	AL-GIHAZ (AG)	HV S/S	2005

E - Power System & Network Studies

No.	Name of Project	Location	Client	Project Type	Date
32	CONSTRUCTION OF NEW 132-13.8kV SWCC S/S 8330	CENTERAL	MAPA	ICS / TRAN-SIENT ANALY-SIS	2025
31	P24101001 Hajer2 380KV PSP	Eastern Area (KSA)	GE	ICS / TRAN-SIENT ANALY-SIS	2024
30	INSTALL C3 C4 REFRIGERATION UNITS&STORAGE TANKS JNFLF	Jafurah - Eastern Province - Saudi Arabia	ENPPI - AR-AMCO	Relay Co-ordination & ARC FLASH& Harmonic Analysis by ETAP	2023

No.	Name of Project	Location	Client	Project Type	Date
29	Jafurah - Juaymah Terminal Expansion	Jafurah - Eastern Province - Saudi Arabia	ENPPI - ARAMCO	ARC FLASH by Etap / Relay co-ordination by Etap	2023
28	120MW Solar Plant - ADEN YEMEN project	ADEN - YEMEN	WSP	Load Flow by Etap Reactive Power calculation	2023
27	SHOIBAH SWCC-2	on the coast of Red Sea, about 120 kilometres (75 mi) south of Jeddah - Saudi Arabia	Ali SHAR Khatib-Alami Water Transmission And Technologies Co	ICS / GT	2023
26	Expansion of AR-RASS PV 380-132kV BSP 9095	Al Qassim Province- Saudi Arabia	Albabtain - ABC / SEC	ICS / NGR	2023
25	380-132kV SAAD PV BSP-9094	Riyadh Region - Saudi Arabia	Alsherief Group SEC	ICS	2022
24	High Voltage Interference Calculation for Gas Pipeline	RIYADH KSA	Al-Shahin Metal Industries	STUDIES	2022
23	HIGH VOLTAGE INTERFERENCE CALCULATION FOR GAS PIPE-LINE OF D/C OHTL FROM URAIDH S/S 8374UP TO BSP 9048, IN RI-YADH AREA.	RIYADH	TDP COMPANY	STUDIES	2022
22	STEAM TURBINE GENERATORS AT SHEDGUM GAS PLANT PROJECT	KSA	ENNPI	ICS study OTSS Study	2022

No.	Name of Project	Location	Client	Project Type	Date
21	overall electrical studies at SHED-GUM GAS PLANT	Eastern Province - Saudi Arabia	ENPPI - AR-AMCO	ICS / TRANSIENT ANALYSIS	2021
20	EXPANSION OF NAJHRAN UNIVERSITY (NJR) BSP	NAJHRAN - Saudi Arabia	SEC	ICS / NGR	2021
19	Construction of Al bayan 9097 BSP	RIYADH - Saudi Arabia	TRADING & DEVELOPMENT PARTNERSHIP CO SEC	ICS / NGR	2021
18	EXPANSION OF AL-FARA 380KV BSP	AL Fara - Saudi Arabia	SEC	ICS	2020
17	Safaniya	Dhahran on the coast of the Persian Gulf, Saudi Arabia	GE - Enppi - Aramco	ICS	2020
16	PS1 - PS2 - PS3	JUBAIL –Eastern Province - Saudi Arabia	GE RIYADH WATER TRANSMISSION SYSTEM	Relay co-ordination by Etap	2020
15	ICS (Insulation Coordination Study) For Safaniyah Debottleneck On-shore Plants S/S	Safaniyah - KSA Aramco	GE	STUDIES	2020
14	ICS (Insulation Coordination Study) for Zuluf Plants S/S	Zuluf - KSA Aramco	GE	STUDIES	2020
13	ICS (Insulation Coordination Study) For Jubail-II 230/13.8 KV S/S	Jubail-KSA Aramco	GE	STUDIES	2020
12	Insulation coordination Study : Expansion Of Najran 380 KV BSP S/S & FRA 380 KV S/S	ABHA-KSA NG-SOA	ASSYSTEM	STUDIES	2020

No.	Name of Project	Location	Client	Project Type	Date
11	Technical Study Report At Both 9053 & Shedgum	EOA DAMMAM	AI-TOUKHI Co.	STUDIES	2020
10	Shoaiba Relays Setting	JEDDAH-KSA SWCC	AI-FANAR Co.	STUDIES	2020
9	Site Services for RABIGH JETTY-2	JEDDAH-KSA SWCC	MSCL	STUDIES	2020
8	Insulation Coordination Study : SFNY TP-21	KSA	GE End client : Aramco	STUDIES	2019
7	Insulation Coordination Study: Shuqaiq 380/132 Kv BSP S/S	KSA	GE End Client : SEC	STUDIES	2019
6	Insulation coordination Study : FRA 380/132/13.8 KV BSP S/S	KSA	Al Gihaz (AG) End Client : SEC	STUDIES	2019
5	Insulation Coordination Study for SAFANIYA TP-21 115 /13.8 KV S/S	SAFANIYA - KSA	GE	HV S/S	2018
4	Insulation Coordination Study : 11k SS Project	KSA	SIEMENS End client : Royal commission	STUDIES	2018
3	INSULATION COORDINATION STUDY - FADHILI Gas Processing Plant - PR 4032610.	KSA	GE END CLIENT: ARAMCO	STUDIES	2016
2	ETAP COORDINATION STUDY IN SUBSTATION-42 YANBU ROYAL	YANBU-KSA- Roya Comi- sion	AI-HAIF	STUDIES	2016
1	High voltage interference study and calculation report for EP-WTS-2 Pipeline PS1 To Dammam.	KSA	YUKSEL End Client: SWCC	STUDIES	2015

F - High Voltage Equipment Review/ FAT and Procurement

No.	Name of Project	Location	Client	Project Type	Date
7	132KV DC OHL from KING FAIS-AL COLLEGE S/S 8533 UPTO BSP S/S 9064.	COA MAJMA	Trading&Develop-ment Partnership (TDP)	OHL	2020
6	132/33KV Hiswa S/S	YEMEN ADEN	ZASCO	Substa- tion	2018
5	132/33 KV, KHOR MEKSAR S/S	YEMEN ADEN	ZASCO	Substa- tion	2018
4	132/33KV, Mansoura S/S	YEMEN ADEN	ZASCO	Substa- tion	2018
3	132KV of OHL between Hiswa & Al Mansura	YEMEN ADEN	ZASCO	OHL	2018
2	132KV 1200mm2 Underground cable between Al Mansura & Khor makser	YEMEN ADEN	ZASCO	Cables	2018
1	Airport 380 KV 9273	COA RIYADH	Trading&Develop-ment Partnership (TDP)	DESIGN REVIEW	2018

G- DESIGN REVIEW

No.	Name of Project	Location	Client	Project Type	Date
7	Ghazlan -3 BSP	JUBAIL	SEC	Design Review	2025
6	Construction of New PP12-B 380KV BSP # 9087	COA	ALGIHAZ	Design Review	2025
5	Construction of Ghazlan-3 PP 380kV BSP	EOA	ALGIHAZ	Design Review	2025
4	Yanbu Tower	WOA	NASCO	Design Review	2025
3	380kV Rabie Project in Dammam	Dammam	CEPCO	Design Review	2025
2	SADAWI PV 380115 kV BSP and Existing 380115 kV NARIYA	NOA	KEC	Design Review	2025
1	4400022052-CONSULTANCY FOR ENGINEERING AND DESIGN SERVICES FOR PDC ENGINEERING & PROCUREMENT		SEC	Design Review	2024

H- SUPERVISION PROJECTS

No.	Name of Project	Location	Client	Project Type	Date
3	4400019009-CONSTRUCTION MANAGEMENT SERVICES FOR EHVPROJECTS	COA (PART-15)	SEC	EHV	2023
2	4400020304-CONSTRUCTION MANAGEMENT SERVICES FOR TAIBAH	WOA (PART 24)	SEC	EHV	2024
1	4400021485-CONSTRUCTION MANAGEMENT SERVICES FOR HVAC OHTL & Converter Station	WOA/COA/ SOA	SEC	EHV	2024

I - PV (Photovoltaic)

No.	Name of Project	Location	Client	Project Type	Date
6	RABGH SOLAR PV INDEPENDENT POWER PLANT 300MW	RABGH / KSA	CSEPMI	PV / Engineering & Studies & supervision	2020
5	Kom-Ombo PV Plants 200MW	Egypt / Aswan	Mahindra Susten & ACWA Power	PV / Engineering & Studies	2020
4	ICS For Safaniyah Onshore Plants	Safaniyah - KSA Aramco	GE	PV / Engineering & Studies	2020
3	ICS for Zuluf Plants	Zuluf - KSA Aramco	GE	PV / Engineering & Studies	2020
2	Insulation Coordination Study SFNY TP-21	KSA	GE End client : Aramco	PV / Engineering & Studies	2019
1	INSULATION COORDINATION STUDY - FADHILI Gas Processing Plant - PR 4032610.	KSA	GE END CLIENT: ARAMCO	PV / Engineering & Studies	2016

J - List of projects related to the effect of electric lines on the pipeline

No.	Name of Project	Location	Client	Project Type	Date
3	High voltage interference calculation for Gas Pipeline of D/C OHTL from URAIDH S/S 8374UP to BSP 9048, in RIYADH area.	RIYADH KSA	TDP company	STUDIES	2022
2	High Voltage Interference Calculation for Gas Pipeline	RIYADH KSA	Al-Shahin Metal Industries	STUDIES	2022
1	High voltage interference study and calculation report for EPWTS-2 Pipeline PS1 To Dammam.	DAMMAM KSA	YUKSEL End Client: SWCC	STUDIES	2015

K - Mechanical Electrical plumbing (MEP)

No.	Name of Project	Location	Client	Project Type	Date
4	ROSHN PROJECT (MEP - LV)	RIYADH EAST	Overseas Electric-eg	LV & MEP - CEC BUILDING, 6VILLAS SUB-STRUCTURE	2023
3	WATER SUPPLY RIYADH CITY SADD WASIA LOT-6	RIYADH-KSA SWCC	NWWC	MEP	2020
2	Kaia Hajj Terminal Plaza	JEDDAH-KSA GACA- AIRPORT	MSCL	MEP	2019
1	KAEC-4 110/13.8 kv HVAC SCOPE	JEDDAH-KSA NG -WOA	SABBAN	MEP	2019

L - Buildings

No.	Name of Project	Location	Client	Project Type	Date
6	CONSTRUCTION OF OFFICE, NG BUILDING AT NARYAH SERVICE CENTER	EOA	SEC	CIVIL WORK	2025
5	Extension of GCCIA Existing 400KV Substation at Ghunan, Salwa and Silla.	EOA	CEGELEC	CIVIL WORK	2025
4	Construction of Pump Station tank at Dharet Al Badeaa, King Salman Park, And Manfouha	COA RIYADH	HAIF	CIVIL WORK	2025
3	TIME SQUARE- PORT SAID PROJECT	Egypt PORTSAID,	CREODEVS	LV	2023
2	Mohandes tower	Egypt MENIYA	Privet Client	Tower	2018
1	DIAMOND TOWER Designing all Electrical and Me- chanical works of the tower	Jeddah KSA	El- Masarat	Administra- tion Building	2014

M - Hospitals

No.	Name of Project	Location	Client	Project Type	Date
3	Al-Mostakbal ophthalmology hospital	Egypt MANSOURA	Emerge Design House	Hospital	2018
2	Development of 440 Primary Health Care Centre (Type-M6)	KSA	Ministry of Health, Saudi Arabia	Hospital	2017
1	EL FAKHRIYAH DAMAM HOSPITAL 100 BED The design work including architectural, structural & MEP scope, also full project construction drawings	EOA" DAMMAM	Saleh Hamd El Kahtawy organization	Hospital	2014

N - AS Built Preparation

No.	Name of Project	Location	Client	Project Type	Date
14	Modon-2 Power Transformer As-Built	WOA JEDDAH	DELTA Co.	AS BUILT	2020
13	438-Al-Adil S/S AS BUILT DRAWING & STUDY SCOPE	EOA DAMMAM	AMC	AS BUILT	2020
12	Tabuk-12 - As Built drawing	WOA TABUK	SIEMENS	AS BUILT	2020

No.	Name of Project	Location	Client	Project Type	Date
11	SADDEA_ AS BUILT	EOA" DAMMAM	AI-HAIF	AS BUILT	2019
10	Adam & Allaith S/S As.Built Schematic Dwgs preparation and review	WOA JEDDAH	DELTA Co.	AS BUILT	2019
9	MODON-2: HVAC DRAWING	WOA JEDDAH	DELTA Co.	AS BUILT	2019
8	QIC#9066 S/S As built Microstation Drawings	COA QASSIM	AMC	AS BUILT	2019
7	As-Built Microstation Drawings FOR TAIBAH S/S	WOA MEDINAH	SIEMENS	AS BUILT	2019
6	Converting Drawings from AutoCAD to Micro-Station as per Seed-II	COA RIYADH	IBN OMIRAH (IOC)	AS BUILT	2019
5	Converting Schematic Drawings From AutoCAD To Microstation	WOA JEDDAH	NESMA	AS BUILT	2018
4	As Built of 110/13.8 kV Jeddah Seaport Substation	WOA JEDDAH	NESMA	AS BUILT	2018
3	As Built Drawings for 10j 380/115/33 KV	MARAFIQ- Yan- bu	SIEMENS	AS BUILT	2018
2	As Built Tabrjal S/S	EOA" DAMMAM	AI-HAIF	AS BUILT	2017
1	Modification Drawing Ext.Jam-mom-2 S/S	WOA JEDDAH	DELTA Co.	AS BUILT	2017

O - Water and Chemicals

No.	Name of Project	Location	Client	Project Type	Date
12	Water Supply Riyadh City-Sadd Wasia Lot-6	RIYADH-KSA SWWC	NWWC	Water Treatment	2020
11	Makhram Water Tank/Pump	Qassim -KSA (MEWA)	Trading & Development Partnership TDP / Khatib & Alami	Water	2019
10	Water Supply Riyadh 3 – Wasia – Buildings & Mechanical Networks	RIYADH NWC	TAQAH – National Water Company	Water treatment Plant	2018
9	Water Supply Riyadh 3 – Wasia – Electrical Systems, Mechanical, Civil & ARCH Design works for new 33 kV switchgear Building & Design works for OHTL / UGC between different areas of project	RIYADH NWC	TAQAH - National Water Company “NWC”	Water treatment Plant	2017

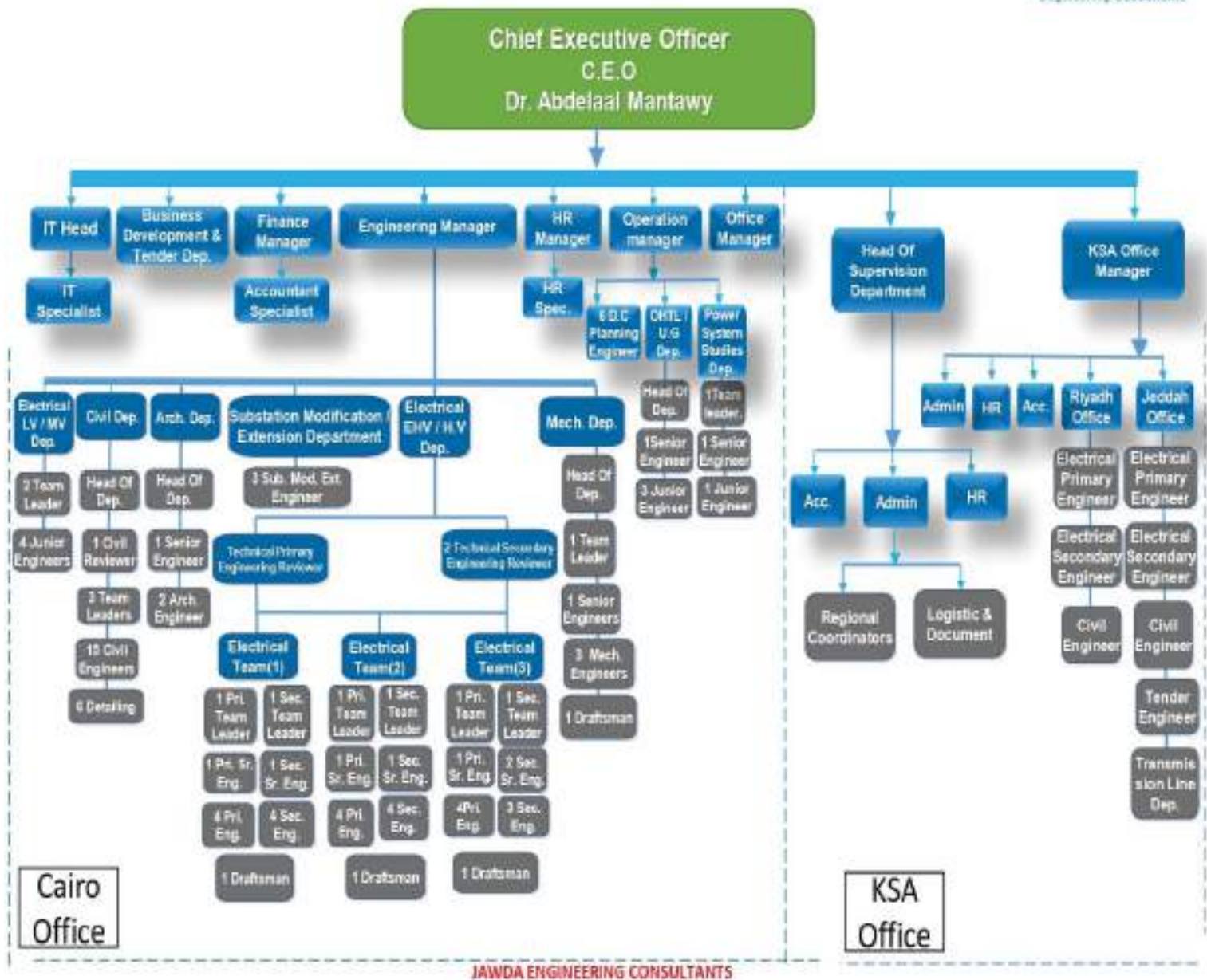
No.	Name of Project	Location	Client	Project Type	Date
8	<p>Assessment of the environmental conditions of the proposed waste-water projects (sewage networks, force mains and PS and wastewater treatment plants: new constructions and Upgrade) in two districts in Kafr El-sheikh governorate (Desouq and Motobus).</p> <p>Financed by EBRD European Bank for Reconstruction and Development</p>	EGYPT Cairo	ARUP	Hydraulics	2013
7	<p>Environmental and Social Impact Assessment for the PROPOSED Safaga Desalination Plant.</p> <p>The study emphasized the 20,000m³/day brine disposal system and their environmental impact on the environment.</p> <p>The purpose of the ESIA report is to obtain permitting from the Egyptian environmental Affairs Agency EEAA.</p>	EGYPT Cairo	MISR Consult for Environment & Infrastructures (Branch Office)	Hydraulics	2013
6	<p>ESIA study for the landfill of El-Kharg City in Riyadh region.</p> <p>The study included field measurements of air quality, water quality and soil quality. The assessment included the proposed recycling.</p>	Riyadh KSA	EL-MOHAYED – MISR Consult	Environment	2013
5	<p>Environmental and Social Impact Assessment for the PROPOSED Al- Yousr Desalination Plant (treated water capacity 40,000m³/day). The study emphasized the 120,000m³/day brine disposal system and their environmental impact on the environment.</p> <p>The study also included hydraulic study for the intake lines from the sea as well as disposal system to the deep marine waters. The purpose of the ESIA report is to obtain permitting from the Egyptian Environmental Affairs Agency EEAA.</p>	EGYPT Cairo	MISR Consult for Environment and Infrastructures (Branch Office)	Hydraulics	2013

No.	Name of Project	Location	Client	Project Type	Date
4	<p>Environmental and Social Impact Assessment for the PROPOSED Wastewater Treatment Plant in KENANAH Compound project owned and operated by ORASCOM Cooperative housing Company.</p> <p>The purpose of the ESIA report is to obtain permitting from the Egyptian Environmental Affairs Agency EEAA.</p>	EGYPT Cairo	ORASCOM For Cooperative Housing	Hydraulics	2012
3	<p>Technical support and capacity building services to the Four Affiliated Companies of the Holding company of water and wastewater HCWW in Gharbia, Sharkia, Behaira and Damietta Governorates. in close coordination with the short term International EIA expert and senior water/wastewater key expert.</p>	EGYPT Cairo	RODECO GmbH, Germany – HCWW Holding Company for Water and Wastewater	Hydraulics	2011
2	<p>Environmental and Social Impact Assessment for the EXISTING Wastewater Treatment Plant in Haram City Compound owned and operated by Orascom Cooperative Housing Company,</p> <p>The purpose of the ESIA report is to obtain permitting from the Egyptian Environmental Affairs Agency EEAA.</p>	EGYPT Cairo	ORASCOM For Cooperative Housing	Hydraulics	2011
1	Water Supply Riyadh City-Sadd Wasia Lot-6	Riyadh-KSA NWC	NWWC	Water	2010



Organization Chart

ORGANIZATION CHART



Our Clients



SIEMENS Ltd.



GE (COGELEX)



ABB Construction Company



Al Babtain contracting Company. (ABC)



Al-Gihaz Holding



AL-TOUKHI Co.



ZAMIL Projects Co.



AL-MASHARIQ Trade. & Contract Company. (AMC)



Saudi Electric Company



Aramco Services Company



Ibn OMAIRAH Co. (IOC)



Advanced Energy Company. (AEC)



JAL International Company LTD.



AL-FOZAN Group. (AUVA)



**Saudi Service for
Electro
Mechanic Works
(SSEM)**



**Saudi Environmental
Protection Company.
(SEPCO)**



**Raissy Trading and
Contracting Company
Ltd.**



**Egyptian Electricity
Transmission Company.
(EETC)**



HAIF COMPANY.



AL Ojaimi Group



**Construction
Network Con-
tracting Co. (CoNet)**



**Khatib & Alami (Saudi
Consolidated Engineer-
ing Company)**



**NESMA National Tele-
communications
Co. Ltd.**



AlFonar Construction



**ELECTROME-
CHA INTL.CO -
L.L.C**



**Deep Dimensions
Contracting Com-
pany
(DDCC)**



MEEDCO-HYUNDAI.



Delta company Ltd .



TAQQAT a member of
the Abdulla Fouad Group



**Dubai Electricity & Water
Authority. (DEWA)**



**Trading & Development
Partnership Co. LTD.**



**CIVIL & ELECTRICAL PROJECTS CON-
TRACTING COMPANY (CEPCO)**



**KADI Trading & Contract-
ing Co., Ltd.**



NECE Co.



**Egyptian German Electrical
Manufacturing Company.**



Service Solutions Co.



SAMA Energy



Mapa Group



**NESMA INFRA-
STRUCTURE TECH-
NOLOGY**



**Al Bushaier Trading and
Contracting Company**



**NASCO
National Advanced
Systems Co. Ltd.**



**AL-HAIDER
COMPANY FOR
CONTRACTING
KINGDOM OF
SAUDI ARABIA**



**Engineering for
the Petroleum &
Process Indus-
tries
(Enppi)**



**Mastoura Contracting
Company**



Saudi Emar Company

List of Joint Venture Companies

EPS (Electric Power Systems Engineering Company) is a Joint-Stock Egyptian Company established in 1982, specialized in carrying out consulting, engineering services and software development in the field of electric power systems and information technology. Since its establishment, EPS has conducted services for about 2900 engineering projects in the fields of electric power generation, transmission and distribution in Egypt and Arab countries.

PROCTAL is a leading management consulting firm specialized in strategic, program project, and facility management. Claims management and dispute resolutions, total quality management, building information modeling (BIM), visualization, skills development, information technology solutions for project management, procurement management services are also special consultancy services provided by Proctal's sister companies.

Jawda Engineering Consultant is a qualified vendor with:



Reg. No. 121362

41126

50237460



Jawda Vendor Number : 210016095
in the field of Engineering service of Electric Substation and transmission projects.

KSA

Jeddah

2264 Abo-Nama Building
3 RD Floor, Office 305
Al-Baladiya Street – Al-Azizia
P.O.Box : 122320 Jeddah 23334, KSA
Tel: +966-122869565
Fax: +966-122869566

KSA

Riyadh

Ishbilyah district
Office 103
Imam Abdullah Ibn Saud Road – building
3349/ 8234 -13225
Tel: +966 50 018 7851

KSA

Dammam

Unit-4 Building 4464, Al-Mazruiyah, Dammam
32414 - 7065
Tel: +966 13324147065

Egypt

Cairo

21 Mohammed Fahmi El-Mohdar St., El-Tayran St.
Nasr City, Cairo, Egypt
Tel: +202-24010612 / +202-24010615
+202-2615254 / +202-24010592
Mobile: +2 01068800141
(+966) 569060208, (+966) 569060207