Electrical Engineering

Supported in our strong values of Trust, Quality, Teamwork, Service, Responsibility, Diversity and Safety our staff provide the design, engineering, construction, commissioning and start up of power generation and power distribution projects, ranging in complexity from low voltage industrial up to 500 kV.
We develop all plans and schematic drawings necessary to study the design concept of
the system, and check conformity with total design criteria before releasing for equipment procurement and manufacturing, as well as permitting process for construction as required by country regulation and/or customers and investors.

- Low / Medium / High Voltage installations from basic concept detailed designs
- Electrical Equipment Installation: Site Plans, Layouts, Sections, Elevations, 3D
- Equipment Specifications / Bill of Materials BOM's
- Substations Control, Protection, and Metering, SCADA Systems
- Prime, Standby and Emergency Power Generation (Engines & Turbines)
- Start / Stop Motor Control Centers MCCs Automatic and Manual Transfer Switches ATS / MTS
- Grounding Designs / Shielding
- Auxiliary Power and Services (Batteries and Back Up Power)
- Medium Voltage Transmission / Distribution Linesdrawings necessary to study the design concept of the system, and check conformity with total design criteria before releasing for equipment procurement and manufacturing, as well as permitting process for construction as required by country regulation and/or customers and investors.

Power Systems Studies / Protection and Control Design

We develop Power System Studies / Protection and Control Designs that includes the analysis of power exchange among different sources, modeling and analyzing networks complexity, interconnection studies, short circuit calculations, transient behavior, and power system control to achieve optimal operating conditions, protection, control, and monitoring.

- Load Flow / Short Circuit Analysis
- Voltage Regulation Short Circuit
- Relay Settings Calculation and Parameterization / Protection Coordination
- Voltage / Transient Stability
- Contingency Analysis
- Motor Starting
- Reliability Analysis
- Power Factor Control
- Arc Flash Hazard
- Single Line Development
- Protection Engineering Design
- Three Line Drawings
- AC / DC System Schematics
- Substation Automation / Communications / Telemetry

Energy Efficiency and Management

We help customers from different industries and sectors to meet their energy savings and efficiency through an integrated and comprehensive approach to energy
management solutions. Our TEAM will be initially doing Power Quality Analysis and Audits performing Evaluation and Monitoring, obtaining solutions that can include lighting, HVAC replacements, motor starting retrofits, and the most cost-eff icient energy management and control systems.

We also provide other technical and commercial solutions such as Power Purchase Agreements (PPA's) and Energy Savings Performance Contracts (ESPCs) as well as planning cogeneration projects based on industry local energy law and regulations.

- Design, Selection, Specifications, and Installations of Correction Equipment for Energy Quality
- Economic Feasibility / Return of Investment
- Load and Voltage Profile Analysis / Motor Starting / Capacitor Sizing and Location
- Harmonic Measurement and Analysis / Harmonic Mitigation Selection, Calculation and Sizing
- Consulting Services for Design, Inspection and High-Efficiency Electromechanical Equipment Selection
- Studies for Technical and Non-Technical Losses in Power Distribution Networks / Systems
- Energy Management & Optimization
- Peak Demand Management
- Energy Audits
- Economics of Power Delivery and Consumption
- Revenue Metering Systems

Field Services, Installations, Testing and Commissioning

We perform factory and site acceptance tests, installations, commissioning and maintenance services to protective devices on any electrical substation or switchyard scheme.

Before the substation energization or interconnection, we provide testing to each system component in accordance with industry stablished standards.

After substation, power plant or sub-system is already energized will perform functional and operational testing.All test reports will be written and deliver by qualified team describing the services and the testing method provided using state of the art up to date calibrated and certified test equipment, proper tools, and materials to perform field works.

- Factory Acceptance Tests FAT's / Equipment Inspections per specification
- Site Acceptance Tests SAT's
- Functional Tests, Start Up Support, Power Systems Synchronization and Energization
- As-Built Documentation
- Testing a wide range of substation equipment including but not limited to Power Transformers, Potential Transformers PT's, Current Transformers CT's, SF6 and Vacuum Breakers, Disconnect & Ground Switches, Reactors, Arresters, Voltage Regulators, Batteries – Back Up Systems, Capacitors Banks, Harmonic Filters, Reclosers
- Power Generators
- As Built Drawings and Redlines Updates
- SCADA Control Circuit Tests

Solar Power & Storage

We develop solar power projects in different scales by combining our expertise with the latest trends and leveraging partnerships with landowners, investors, equipment manufacturers, electric utilities and customers.

Using tools to facilitate decisions makers the understanding of projects economics and different taxes credits due to the renewable energy incentives on different application scenarios by analyzing savings and rate of the return of investment.

- Utility Scale Projects
- Corporate Rooftop Projects

DECONS ENERGY

+1 904-250-5115
info@deconsenergy.com
deconsenergy

www.deconsenergy.com

About US

DECONS ENERGY is a service provider to power generation and energy infrastructure sectors, delivering a comprehensive range of Engineering, Procurement, Construction and Project Management services.

Our company provide to our customers turnkey solutions that begins with the front-end planning process, including feasibility studies, conceptual design, preliminary design, then moving to engineering drawings, construction administration, project management and finally commissioning and start-up.

With resources with expertise with over almost 2.5GW in over 20+ different countries around the globe, our TEAM has been building long term relationships characterized by flexibility, adaptability, teamwork and commitment to meet and exceed customers expectations no matter where or how big or small is your project.

Focused on the power generation, high voltage systems, power distribution networks and the energy management services, we create, design, procure and constructs integrated solutions supported by an experienced and trusted engineering team committed to deliver successful projects.

Our Services

DECONS ENERGY, LLC is an Engineering, Procurement and Construction (EPC) contracting services company dedicated to design, manage and develop turnkey projects for the energy and power generation industry. Supported by trusted and experienced team of professionals and subject matter experts, our company can help you by providing the support you need to ensure the success of your projects.

- Project Management
- Project Engineering
- Electrical Engineering Power System Studies / Protection and Control Design
- Energy Management & Efficiency
- Field Services / Installation, Testing, and Commissioning
- Solar Power and Storage
- Mechanical Engineering

Our team of experienced engineers are committed to provide to our customers the best added value and a service experience above and beyond their expectations.

Project Management

Project Management is an essential process required to guarantee the high success of projects in the energy industry. The complexity and scale of projects of this industry present significant risks to all project stakeholders when not managed correctly, neither by experienced industry professional.

Most projects often suffer distress in the form of contracting services and third parties and project mismanagement. That get reflected in over cost, over time, performance failings and disputes between project stakeholders with not positive benefits. DECONS ENERGY Project Management Certified Professionals ensure that each stage of the project get managed accordingly adopting best negotiation and contracting strategies customized for the fast tracked energy market.

- Define the relationship between all project stakeholders
- Evaluating organizational strategy and projects for successfulcompletion
- Develop successful contractual relationships with contractors and third parties to properly balance the risk
- Manage the communication between all stakeholders involved to ensure successful completion of the project
- Develop effective risk allocation strategy
- Reviewing the project performance through effective planning and communication

Project Engineering

Our team has substantial experience developing turnkey projects for the installation of aeroderivative turbines, large reciprocating diesel generator, power substations, MV distribution and photo voltaic systems. We successfully complete engineering projects meeting the goals deadline set by our customers and regulating entities.

Our strategy takes into consideration a step-by-step process when developing the project plan to ensure the most const efficient solution and the execution time of each project stage.

· Front End Planning (Feasibility, Conceptual Design, Preliminary Design)
· Technical Equipment Specifications
· Cost Estimation / Budget Preparation
· Bill of Material(BOM) Development
· Health, Safety and Environment HSE
· Job Development Inspection
· Hazard and Operability Studies HAZOP
· Administration and Management Support

Mechanical Engineering

We offer to our clients a breadth and depth of experience through our industry knowledge to deliver fully integrated solutions that are safe, reliable and cost-effective. Our expertise allows us to specify, design, factory test, install, field commission and start-up of a large diversity of gas and liquid fuels distribution systems using industry best practice and standards.

Our gas and liquid fuels equipment design and specification capabilities involve the asset lifecycle from design, installation, testing, startup, factory design to construct, timely inspection, utilizing our project management methodology.

- Pipelines Specification, P&ID Drawings, Design, Calculations & Construction
- Installations & Commissioning
- Alignment, Welding Specifications
- Stacks, Structural Designs
- Fire Suppression Systems Design and Specifications
- Liquid Fuel Equipment
- Liquid Natural Gas (LNG) / Liquid Propane Gas (LPG)
- Natural Gas (NG)
- Hydrostatic and Pneumatic Test for pipelines according to ASME standards
- Calculation of Hydraulic Losses in pipelines
- Stress Analysis for pipelines
- HAZOP Study
- Corrosion Control & Cathodic Protection
- Liquid Natural Gas (LNG) / Liquid Propane Gas (LPG)