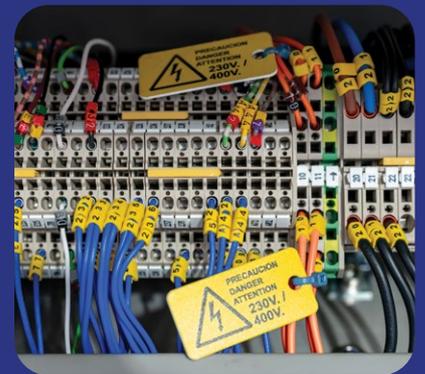


JIREH

— POWERTECH —

innovate, integrate, inspire...



JIREH POWERTECH PRIVATE LIMITED

www.jirehpowertech.com

LEADERSHIP



Mathan Thaveedu

Managing Director

Mathan Thaveedu is the Managing Director of Jireh Powertech Pvt. Ltd. with a Degree in Electrical and Electronics Engineering. His vast professional experience includes all aspects of a substation from conception to decommissioning. He has led the Engineering, Quality control, Project Management, Technical skill development and strategic planning in various stages of his career. His vision is to create employment through the Power sector and empower the youth of India.

Angelin Ruth

Director

Angelin Ruth is one of the Directors of Jireh Powertech Pvt. Ltd. with a Degree in Electronics and Instrumentation Engineering. Her professional experience has been in multinational companies in Engineering design in EPC (Oil and Gas) and the Chemical Industry. She has worked on various greenfield, revamp and global turn around projects. Her passion is to create strong Engineering teams with excellent quality.

ABOUT US

Jireh provides on-time quality services to its clients through its trained engineering professionals who follow the highest safety standards.



Our Vision

Empowering people with efficient and sustainable energy resources



Our Mission

To inspire growth through innovative solutions in energy resources by integrating global ideas and technologies valuing integrity, commitment, and excellence.



SHE-Triple O



- ▤ Operations across 3 Continents and 22 Countries.
- ▤ Offering excellent services in Engineering design, Erection, Testing, and Commissioning of Electrical HT / LT equipment / Control Relay Panel / Numerical Relay, Retrofit of Relays / Panels / LV Breakers, Substation Automation Systems (SAS) / IED Integration & PLCC / Telecommunications. Supplying LT / HT panels / Equipment / Numerical Relays / Cables / SAS Products & Network Devices.
- ▤ Achieved all our success with a strong commitment to ethics, honesty & integrity by meeting all legal, compliance, and statutory requirements.
- ▤ Determined to achieve year-over-year improvement in safety performance with our **"SHE - Triple O"** safety policy.

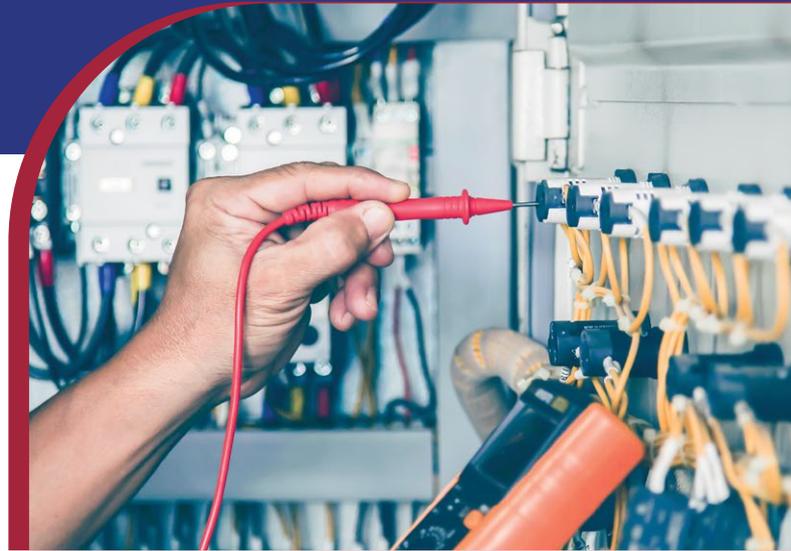
Product Knowledge

	Products	Softwares
	<p>SAS: RTU500 SERIES, RTU 211, RTU232</p> <p>RELAY: RELION 650, 670 & SPA SERIES - NUMERICAL RELAY</p> <p>TELECOMMUNICATION: FOX 505, 515,615, DIGITAL PLCC, ETL 600. EPABX NSD70D, 570, ETL 40 & 80 SERIES</p> <p>PLC: AC 500, 800M</p>	<p>SAS: MICROSCADA, SYMPHONY PLUS, RTUTIL, 800XA</p> <p>RELAY: MULTIPROG WT, PCM600</p> <p>TELECOMMUNICATION: FOX VIEW, FOXMAN, FOX CST, HMI 600, 570</p>
	<p>SAS: A8000 SERIES, AK3 SERIES, TM1703,AK1703, 6MD SERIES</p> <p>RELAY: SIPROTEC 4, 5 & ARGUS SERIES - NUMERICAL RELAY</p> <p>TELECOMMUNICATION: FOTE - ECI, DIGITAL COUPLER SWT3000</p> <p>PLC: SIMATIC S7 SERIES</p>	<p>SAS: SICAM 230 (HMI), TOOLBOX II, SICAM PAS, WINCC (HMI), SICAM DEVICE MANAGER</p> <p>RELAY: DIGSI4, DIGSI5, REYDISP</p> <p>TELECOMMUNICATION: LCT - NPT, POWERSYS</p>
	<p>SAS: C264, SAITEL RTU</p> <p>RELAY: PX20, PX30, PX40, VAMP SEPAM, P3 SERIES - NUMERICAL RELAY</p> <p>PLC: MODICON PLC</p>	<p>SAS: PACIS, ECOSUI, VIJEO CITECT, EPAS, PSO, CLEAR SCADA</p> <p>RELAY: GBD, EASERGY STUDIO, EASERGY PRO</p>
	<p>SAS: F650, C264, C650 - RTU/BCU</p> <p>RELAY: C70, L90, D60; M871, PX40 - NUMERICAL RELAY; MULTILIN NUMERICAL RELAY</p>	<p>SAS: A-VIEW, DS AGILE GE SIMPLICITY</p> <p>RELAY: BITRONICS 70 SERIES, MICOM S1 AGILE, ENERVISTA</p>
	RTU DF1725	DF1900
NR ELECTRIC / SIFANG	PCS, RCS SERIES / CESC SERIES	PCS - EXPLORER / CESC
	SEL421, SEL387, SEL2505, SEL451	ACSELERATOR, SURVALENT, ZENON
	HUSKY RTU	HUSKY STUDIO
	ZENON PRODUCTS	ZENON ENERGY EDITION, ZENON ANALYZER, ZENON SUPERVISOR
	ZIV RELAY, MICROSOL -XCELL RTU ,CPT GATEWAY	ZIVERCOM PLUS, ZIVER CID, CG WORKBENCH

WHAT WE DO?

We work in Electrical Sub-station, Utilities & Power plants.

We offer customized solutions as well as execute turn key projects.



Components of Service Delivery

Substation Electrical & Civil Design and Engineering

Erection, Testing & Commissioning of Primary/Switchyard/Switchgear/GIS equipment, Operation & Maintenance

Testing of Relays, CRP Panels and Retrofit Solutions

Installation & Commissioning of RTU & Data Concentrator and Energy Management System (EMS)

Sub-Station Automation Systems (SAS) Commissioning

PLCC & FOTE (SDH) Testing

Renting of Modern Testing Kits

Supply, Integration of SCADA Solution

Supply of Equipments, Panels, Software Requirements and Accessories

Supply of Network components

Substation Electrical Design and Engineering



- Primary & Secondary engineering documents of T&D sub-stations upto 765kV, LT sub-stations & Power plants (EBOP).
- Digitalization of Control and Protection schematics of Conventional CRP from the old drawing or by a physical inspectional survey of the panel.
- Design Software exposure on E-TAP-Power Station (Electrical) Load flow, short circuit and power system analysis.
- Harmonic analysis and report submission using Power Analyzer
- Design, calculations, and analysis of Electrical Sub-station and Power plant

Engineering Documents

- Design calculations of CT
- Power Transformer & Cable Sizing
- Equipment layouts
- Earthing layouts
- EBOP cable schedule for DCS, ECP, MV & LV Switchgear and other panels
- PT
- Relay setting calculation
- Cable tray layouts
- Lighting layouts and Cable schedules

Erection, Testing & Commissioning (ETC) and O & M



Erection, Testing and Commissioning of HT & LT Equipments

- Erection of Switchgear, Switchyard equipments & Panels
- Testing & Commissioning of GIS up to 400kV level
- Testing & Commissioning of AIS up to 765kV level

HT & LT Equipments

- Isolator/Disconnecting switch
- Circuit Breaker
- Current Transformer
- Capacitor Voltage/Potential Transformer
- Surge arrestor
- Power Transformer
- Aux. Transformer
- Power cable
- LV / MV Switchgear
- DC System and Earthing
- Battery Bank

Operation & Maintenance (O & M)

- O & M manual preparation
- Routine maintenance
- Typical preventive inspection and maintenance
- Breakdown maintenance
- Periodic preventive maintenance
- Good Utility Practice
- Manufacturer's instructions recommendations
- Applicable industry standards

O & M Equipments

- Switchyard equipment
- Switchgear Panels
- Control & Relay Panels
- Sub-station Automation system
- DC Systems

Testing of Relays, CRP Panels and Retrofit Solutions



- BOM verification of Panel
- Scheme checking
- Configuration & Testing of Relays
- Functional check of Panel
- Pre-commissioning and commissioning of Panels

Retrofit Solutions

- Upgradation of Scheme for the proposed device
- Dismantling of Existing device / Panel
- Mounting of proposed device with necessary accessories
- Retrofit Scheme checking
- Device Configuration
- Device Testing & commissioning

Retrofit Devices

- Control & Relay Panel
- Numerical relays
- Bay Control Unit (BCU) & BCPU
- Disturbance recorder
- Event logger
- LV breakers

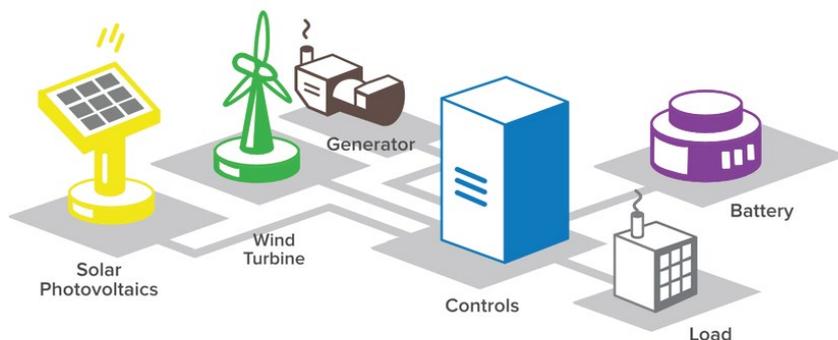
Installation and Commissioning of RTU and Data Concentrator and Energy Management System (EMS)



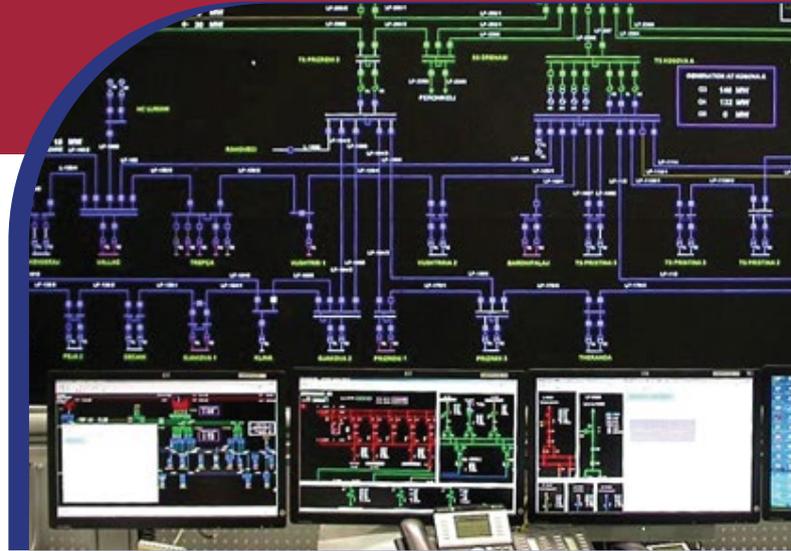
- Site survey
- Engineering documentation viz. SLD, Control room Layout, BOM, I/O List, modified scheme drawing & Cable schedule
- Panel Erection, Cable laying, Glanding & Termination, Wiring of MFTS, CMRs, Interposing relays and HDRs
- Database preparation for RTU and Data concentrator
- Configuration & Integration of IED/MFT with RTU
- Testing & commissioning of RTU
- As-built scheme drawings

Energy Management System (EMS)

- To provide EMS system for easy and multiple access by management to review & analyzes power flow
- Reporting for regulatory compliance and Energy Accounting
- Trending and monitoring energy consumption



Sub-Station Automation Systems (SAS)



- Design of System Architecture
- Hardware & Software recommendations
- Supply of hardware & software requirements
- Database creation
- Ethernet switch configuration
- Commissioning of BCU, BCPU and PMU
- IED, Energy Meter & GPS integration
- HMI & Gateway configuration
- Communication establishment with control center
- Web hosting and FTP configuration
- Controllers communication through OPC protocol construction
- SAT-Point to Point Testing

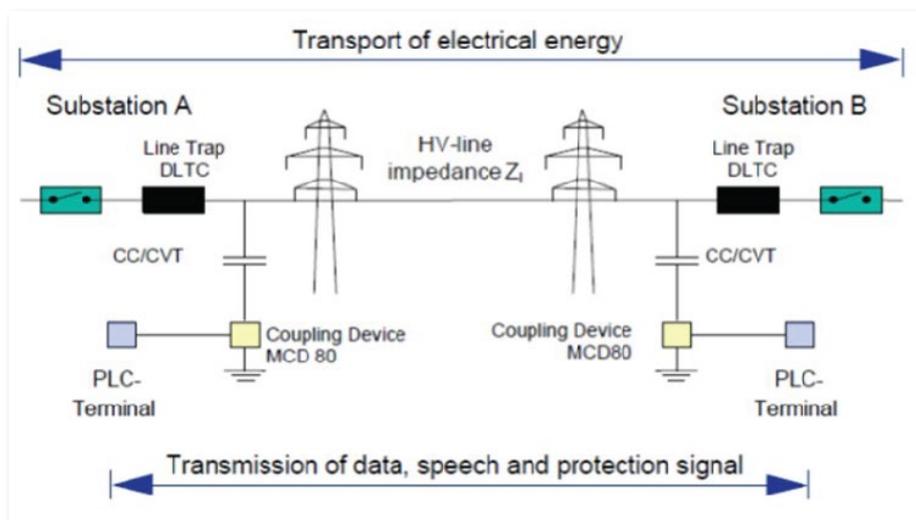
Customized Solutions

- Commissioning of SAS in fresh Sub-stations
- Commissioning of SAS in conventional sub-stations
- SAS Upgradation
- Integration of third-Party make IED in existing SAS
- Integration of inter-make SAS

PLCC & FOTE (SDH) Testing



- Installation & Commissioning of PLCC equipments
- Installation of FODB & LIU
- FO splicing, OTDR testing
- 4 wire E&M and 2 wire hotline - Transmitting the Voice
- E1 configuration & integration
- Data integration between RTU / Gateway & control center
- Integrating tele protection signals
- NMS commissioning



Equipments

- Wave trap
- Analog & Digital PLCC equipment
- PDH & SDH equipment
- EPABX
- Analog & Digital Protection Couplers

Training and Development



We provide wide range of exposure through the Training courses in the following areas

- Networks & Protocols
- RTU & SCADA
- Power system & Protection
- Primary Equipment Testing

Offers exposure with hands-on experience in

- Configuration & Testing of RTU
- SCADA commissioning
- Integration of various IED with SAS
- CRP Scheme check
- Relay Testing
- Handling of Primary and Secondary injection Testing kits

Beneficiaries

- Utility Customers
- University students
- Graduates & Engineering Professionals

Modern Testing Kits

Primary

- CPC 100 with Booster up to 2000V - Omicron
- TAN Delta - Omicron
- Circuit Breaker Analyzer (CBA 3000) - ISA
- Sweep Frequency Response Analyser (SFRA)-ISA
- High potential Testing kit (HI pot)
- Breaker Timer - CRM kit
- Winding resistance kit
- Earth resistance meter
- CT primary injection kit
- Dew point Meter (DM70) - Vaisala
- CT Analyzer - Omicron

Secondary

- Omicron CMC 356 -Secondary injection kit
- Ponovo PW636i - Secondary injection kit
- Megger SMRT46 - Secondary injection kit
- Single phase secondary injection kit

Special Equipment's

- Level Meter & Level Generator (SLM & SLG) - Electronica ET91
- Power meter - Expo
- Ferrule Machine - Letawin
- FO Splicing Machine - Fujikura
- CMC 256 plus



Supply of Equipments, Panels, Software requirements and Accessories



- LT & HT equipments, CRP
- LT Panels - PCC, MCC, MLDB, Starter & Enclosures
- Numerical relays
- Bay Control Unit (BCU) and Multi-function meter (MFM)
- SCADA Zenon COPADATA
- Sub-Station Automation system
- RTU - ZIV
- PLCC, FOTE, OLTE & IDH Equipments
- GPS, Ethernet switch, Router & Server
- LIU, Fiber optic, Patch cards
- Screening cable & CAT5 Communication cables
- Industrial PC for DC & HMI
- PC based Integrated Data Concentrator
- AC/DC Converter and Modbus Converter
- IEC 101, 104, 61850, Modbus protocol HMI software
- PLC & VFD
- OFC Cable Pigtails
- Copper control cables
- Inter-connecting FRLS copper wires & Termination accessories

Supply of Network components

IT Services

- Cloud Consulting Services
- Network Infrastructure Optimization
- Compute and Storage Workload Capacity Planning
- Enterprise Back-up plan
- Email and Endpoint Security
- Infrastructure & Application Management Services
- IT Help Desk Services (L1/L2/L3 support)
- Backup and Disaster Recovery as a Service
- Database Management Services
- Network Management Services



Salient Features of various IT needs:

- Server & Storage:
- Servers that are built for businesses ready to run on-premises and hybrid cloud applications
- Hyper-converged Servers that dramatically simplify IT by combining infrastructure and advanced data services for virtualized workloads on a single device
- Cost effective storage solutions with the ability to scale along with growth of data
- Cost effective DR and NDR plans
- Ability to provide a single solution that can serve as firewall, IPS/IDS, NAC, Gateway antivirus, Email filtering

Software:

- NGINX, JBoss, Apache, IIS, WAS
- MySQL, PostgreSQL, MS SQL, Oracle
- Dockers, Open Shift
- WAF, DAM, PAM, SIEM, IPS, FIM

Other Tools

Deep Security, BigFix, Infra Monitoring, Ticketing System, Change Management System, Inventory Management System, Anti Malware

Major Projects in India



- Supply, design, Installation, Testing and commissioning, integration with control center SCADA system at **1142 MW Wind Turbines and 28 MW solar plant with Centralized control center - Sembcorp Green Infra, Gurgaon**
- Testing and Commissioning of SCADA System at **STT Data Center - Chennai - SIEMENS**
- IEC configuration of siemens make relays for establishing SCADA communication. (**Nxtra Data Center at Siruseri) - L & T**
- LV Panel Supervision work(Erection to Testing and commissioning) at **Hyderabad Amazon Data Center. - ABB Nashik**
- **220/132/66/33kV** Existing CRP panel Dismantling, new CRP Panel erection, cable laying, glanding, Termination, Testing and commissioning at **BBMB - SIEMENS**
- Installation, Testing and Commissioning of Data Concentrator and Installation of Numerical relays at **STT Data Center - Pune - SIEMENS**
- **250MW** Solar Power Plant Testing & Commissioning of at **REWA - ABB**
- **400 / 220kV** Relay retrofit and commissioning for 65 Bays - **GE - GETCO**
- **132/33kV S/Stns.** Upgradation from conventional into SAS substation - **OPTCL - SIEMENS**
- **220kV** Control & Relay Panel Retrofit & Commissioning **GE - APTRANSCO**
- NTAMC & URTDSM - **RTU, BCU & PMU** Commissioning in **765/400/220kV S/stns -GE - PGCIL**
- RTU Installation & Commissioning of **300s/stns. Under RAPDRP scheme - Dongfang -TANTRANSCO & SIEMENS - PSPCI & UPCL Projects**
- Erection, Testing & Commissioning of Yurembam S/stn, - **Sterling and Wilson -MSPCL**
- Erection, Testing & Commissioning of LV system, **TATA KPO - ABB -TATA**
- BCU and Numerical Relay retrofit and Testing and commissioning at OPTCL vsites - **GE.**
- Integration & Commissioning of PLCC, FOX 615 SDH-PDH equipment's - **ABB - TANTRANSCO & APTRANSCO**
- LV and MV Switchgear panel Re-vamping at **NTPC Korba - ABB**

Major Projects Overseas



Testing & Commissioning

- Petronas Flooring LWG2 - **China**
- **275/33kV Mapai 132/33/11kV Samajaya SS - Malaysia**
- **126 MW Hera & 144 MW Betano Diesel PP, East Timor**
- Power plant, Ship building, Processing units & Sub-stations at **China, Malta, South Korea, Philippines, Indonesia, Srilanka, Malaysia, Cambodia etc.**
- **400/220kV Isinya S/stn. at Kenya - KETRACO, NCC**
- **132kV Rupsa S/stn. Bangladesh - ABB-Orion -PGCB**
- PLCC commissioning Afghan - Irdia Friendship Dam at **Afghanistan - BHEL**
- Testing & Commissioning, **225kV Mali S/stn. - Angelique International Limited**
- **GS E & C Refinery at Egypt**
- **66/22kV Mount Coffee SS, Bush Rod SS & Paynesville SS at Liberia - LEC**
- **33/11kV Sokoine GIS at Dar-Es-Salam - TANESCO**
- SCDA3 90MW PV Plant MCR Substation at **South Africa -ABLON**
- **225/16.5kV - DJIBI S/S & 90/16.5 kV SS Anoumabo, Abidjan at IVORY COAST- CI ENERGIES COTE D'IVOIRE**
- **225kV S/stn. at Mali**
- SDH & SWT300 Protection coupler commissioning at 63/20kV Al-Bawadi Mall S/stn. at **Djibouti - EdD.**
- Design, Erection, Supply, Testing & Commissioning of RTU at **DESCO Project - Bangladesh**
- HT/LT, Numerical relay Supervision, Testing & Commissioning of Siemens 50MVA Solar Power plant at **Britta, Togo -Jackson**

SAS & IED Integration

- SAS Commissioning at SEC S/stns - **SAUDI ARABIA - GE, Kahramaa S/stns - Qatar - GE**

Customer Training

- **Indonesia - KDL Project - ABB Singapore**
- **East Timor - 126MW Hera & 144MW Betano - ABB Singapore**

Sub-station & Plant Engineering

- SAS Commissioning at SEC S/stns - **SAUDI ARABIA - GE, Kahramaa S/stns - Qatar - GE**

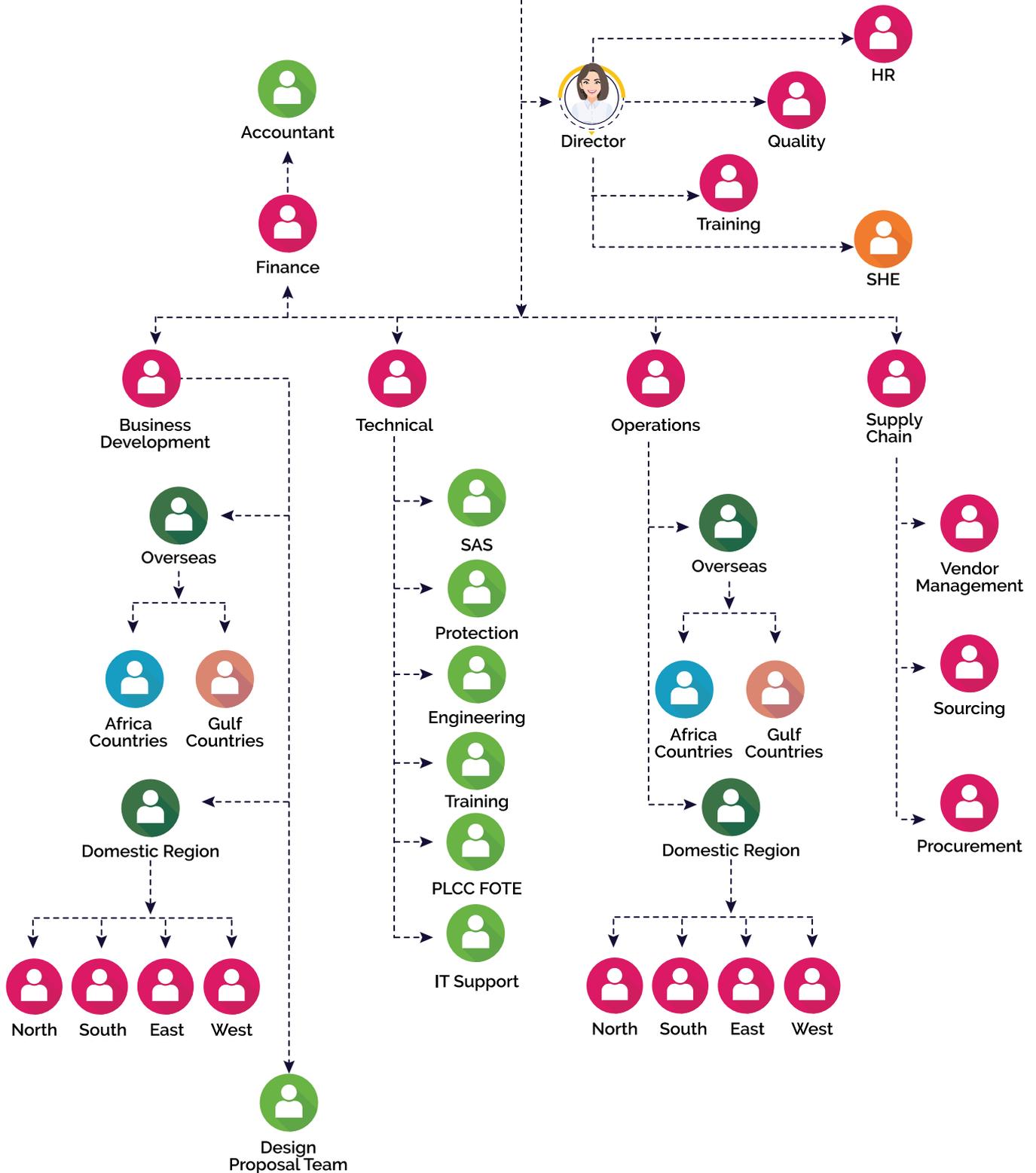
RTU Integration

- **132/33kV Njiro S/S at Arusha - TANESCO**
- Integrations of SEIL make numerical relays with efacec RTU through IEC 61850 protocols

Flow chart of Organization



Managing Director



Our Major Clients



LARSEN & TOUBRO



sembcorp

Gamesa



TATA POWER



linxon

A HITACHI ABB POWER GRIDS & SNC-LAVALIN COMPANY



ARKEN SOLUTIONS
PVT LTD



KALPA TARU®

Kalkitech



TECHNO ELECTRIC &
ENGINEERING CO. LTD.

KEC

KEC INTERNATIONAL LIMITED

KSEB



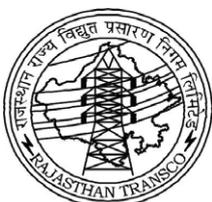
STERLING & WILSON



SNS TECHNOCORP
EXPERTISE IN ENGINEERING & MAINTENANCE



Leading Through Innovation





JIREH

— POWERTECH —

innovate, integrate, inspire...

Registered office:

JIREH POWERTECH PRIVATE LIMITED

Ground floor, Shishu Mandir Road, Behind TVS Showroom,
Chitalanka, Dantewada, Chhattisgarh - 494449

Contact us at : 9791665717

Email: info@jirehpowertech.in | Website: www.jirehpowertech.com