

## Key Skills

**Design Management** 

Instrumentation & Control

**Project Management** 

**Product Development** 

**Operations & Maintenance** 

**Installation & Commissioning** 

Stakeholder Management

**Risk Assessment** 

**Cost Estimation** 

Vendor / Supplier Management

**Client Relationship Management** 

**Cross-functional Coordination** 

**Team Management** 

# Soft Skills



### **DEEPAK SHARMA**

### Design Engineering / Project Management / Research & Development

Result-oriented professional with nearly 24+ years of rich & qualitative experience in executing prestigious projects of large magnitude within strict time schedule, cost & quality as per the project management and best practice guidelines & norms across

Renewable, Process and Automation, Cement industries, Data Centre

Industry Preference: Solar Energy / Automation / NPD

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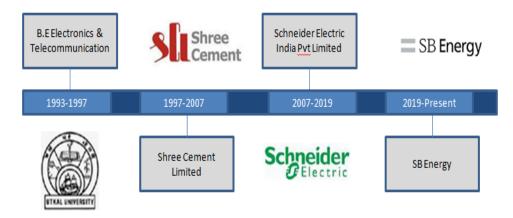
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# Profile Summary

- Significant exposure in managing project activities from conceptualization to execution which include technical specifications, stage inspections, progress monitoring, site management, technical audit project wise, quality inspection & manpower planning.
- Cross-functional experience in managing the plant operations & maintenance with key focus on bottom-line profitability by ensuring optimal utilization of resources.
- Excellence in managing Instrumentation Engineering activities involving resource planning, inspection, team building and co-ordination with internal / external departments.
- Hands-on experience in planning & effectuating breakdown, shutdown & preventive maintenance, cost optimization and reliability centered maintenance for Instrumentation & Control Systems to increase the uptime & reliability and identifying the areas of bottlenecks /
- breakdowns Expertise in the areas of design coordination, selection of field instruments (PLC, SCADA, RTU, Drives, Soft Starter & Weigh Feeder), cyber security installation, testing, commissioning & troubleshooting of all field instruments, control systems, data center, RCA, 8D analysis and Why-why analysis.
- Resourceful in **implementing the detailed project reports** and project execution plans after thorough discussion with clients, selection of sites and project evaluation in terms of outlays & profits attached.
- Skills in **coordinating with vendors** for negotiations, preparation of tender / contract documents, cost estimation, and so on Co-ordinated & Witnessed at CPRI for Short circuit tests (Main and Conditional tests), Heat Run tests, Dielectric tests (HVPF & Impulse test), Resistance corrosion tests (Salt mist & Damp heat test), IP tests, Mechanical strength tests, Mechanical impact test, etc.
- Resource planning & material planning (BOMs), client & supplier co-ordination till ETO/CTO & launch during Prototype/Pilot runs as per IEC/UL/IS.
- Knowledge of SCADA / OT Security Policy and Framework development
- Achievement-oriented professional with excellent people management skills and proficiency to manage change with ease.





B.E. (Electronics & Telecommunication) from Utkal University, Bhubaneswar in 1997



#### Conferred with:

- o Solar Solution Cost Optimization Award in 2017
- 4C Award (Connect to Customer / Connect to Anywhere / Connect for Efficiency / Connect for People) in 2016
- Technical Excellence Award in 2011
- o Patent Award for Prefab Container Solution for Solar / Sub Station and Data Center in 2013
- o Patent Award for Advance Monitoring System in DC Fuse Box for Solar Power Application in 2013 Bagged recognition as Best Project Team in 2010 & 2011
- o Proven track record of managing more than 1GW Solar Inverter commissioning Designed & commissioned more than 2GW+ Solar Projects including SCADA monitoring Administered:
- o SCADA customization & development for solar project and price reduction around 20%.
- o Container Solution customization for cost optimization / commissioning time saving.
- o AJB Communication Board customization in coordination with 3<sup>rd</sup> party and implemented the same at site, which resulted in reducing the cost by approx. 40%
- o 2MW Inverter AC Box Design and customization as per Indian solution and cost optimization around 35%.
- o PV Module cleaning Robot develop in house, price reduction around 20%-25%, Patent already file, may be get in September end.
- o develop portable string monitoring box, where we use for PV Module soling measurement.
- o Implement FRS / ANPR at site, where we track person & vehicle monitoring, this is automatic attendance / vehicle entry system / Security System.
- o EL Image camera develop for PV Module micro crack finding and overall price reduction around 25%-30%.

Created AJB & DC Box in India and customized them for cost optimization as per the Indian standard & market Implemented Wireless System in Solar Project for the first time (more than 120 MW) for large solar plant in 2015, which resulted in achieving less commissioning time and saving cost around 12-15% in compare of FO cable Played a vital role in developing & customizing VAR Compensation solution in SCADA as per the KPTCL requirement Successfully managed 5 different projects commissioning with Global Team for Solar SCADA including tendering, engineering, panel manufacturing, testing, FAT, SCADA &PLC Software Development and SAT finally project was handover Managed commissioning of 2 Cement Plant with Schneider Global Team including BOM, Project Management, SCADA, PLC Programming, Field Device Communication establishment, Filed Instrumentation, Belt weigher, Weigh Feeder, Coal Firing System, Pressure Transmitter, Temperature Transmitter, Control Valve, PID Tuning, Crusher, AC Drive, HT Drive, and so on Performed commissioning of more than 5 GW Project Solar SCADA / DC Design / Remote Monitoring Solution with remote access and SLDC Communication.

Take care of quality of work (Product / site Erection and Commissioning / Operation and Maintenance).

Worked as technical lead for Container Solution development in India with support of France technical experts.



### Since Aug'19: SB Energy, Delhi as an NPD Head (Operation & Maintenance)

- o Plant Operation / Maintenance / Technical Audit / Quality more than 2.5 GW.
- Prime responsibility of Plant Availability, Plant Performance, RCA, 8D, Why-Why analysis, Detail breakdown analysis and Breakdown Reduce,
   Preventive Maintenance.
- o Competency Matrix created for Internal and outside person training.
- o SCADA Availability, Implementation ROC, Digitization, Digital platform, Remote Connectivity & Azure Cloud.
- o Product development from Dec 2020 develop total 4 product (PV Module cleaning Robot, Portable String Monitoring, EL Image Camera, Asset Tracker, TEMIEC Current Monitoring Inverter PCB Indianization work start.

### Since Jan'07: Schneider Electric India Pvt. Ltd., Bengaluru as Senior Manager (Design & Engineering)

### Highlights:

Designing & implementing Utility Scale Solar PV Plants in India Preparing:

- SCADA / PLC System Architecture with IO List and cable schedule
- o I/O configuration and DCS/PLC Communication Network configurations
- o Field Instrument List according to Plant Flow Sheet
- Preparation IO List / Cable Schedule / Plant SCADA / PLC Programming
- o Expertise in designing of Data Centre, Technical Panels, HV & LV Panels & Hand-held Units for filed EMI/EMC and IP Class Design. Having good practices & strong exposure to wide range of electrical products.
- o Certification involvements: Representative sample of BMRCL Main LT panel has been tested in CPRI-Bangalore and owned "TTA certificate" as per IEC 61439-1&2.

Managing overall end-to-end delivery of project within timelines through effective stakeholder management across all internal teams Ensuring the complete handover from Sales Account Manager on project deliverables and client side Coordinating with OT Security Vendor for Tank Farm Project; performing risk assessment of Industrial Control System / SCADA network Acting as Technical Consultant for DCS / PLC / Safety Guard System / ESD System

### Administering:

- DCS/SCADA Advance Solution SAT Performed for ORDER Management / ALARMS / client Process Management System systems.
- Field Instruments commissioning and troubleshooting control valve.

- o Development of SCADA screens with graphics, animation for various parameters as per process flow sheets testing
- o Alarm generation, assigning security for different users, maintaining history, trending, and report generation.
- o New product developments (Electrical / Mechanical / Automation) as per market requirements and cost optimization.
- o Signal Testing, loop check & functional check and software & hardware configuration
- o Solar Schneider Inverter and UPS Commissioning & monitoring solution for all projects
- o Value propositions in design during presales and project implementation to achieve higher returns.
- o Solar Plant DC Design / Plant Layout / BOQ / PVSyst, Solar GIS software simulation
- o Single Line Diagram of DC system (PV Module sizing, DC wiring, Fuse Box, Inverter).
- o AC Systems (RMU, Transformer, HT Panel, LT Panel, HT Cable, Single Phase UPS, Three Phase UPS Protection Relay, and so on)

Working on OPC, OPC-UA, DNP3, IEC61850, SNMP, MODBUS, MODBUS TCP, MODBUS RTU, CAN OPEN, PROFIBUS, IEC103, IEC104, TCIP / IP & IPV4 protocol, Understanding functional loop diagram and managing implementation control logics Participating in FA; creating Panel PLC Drawing for ICR and MCR for Solar SCADA Contributing in understanding customer technical requirement and offering suitable solutions during sales cycle, Providing sales & tendering support for preparation BOQ; preparing & reviewing technical documents for vendors / customers Preparing schemes for SLDC/RLDC (State Load Dispatch Centre / Regional Load Dispatch Centers projects. Responsible for project management from solar design and electrical equipment commissioning Setting up, up-front & the list of criteria by which the customer will assess the quality of work Rendering presales / tendering support with documents commitment on performance guarantee of the plant Taking care of the System Design of Solar Power starting from 5MW to 130MW Supporting the design of monitoring system (PLC & SCADA), Helping the team in selection of right module by doing PVSyst analysis, Collaborating with supplier for module, inverter, AJB, Fuse Box, SCADA products to finalize key supplier Facilitating technical support to Sales on Inverter/Solution selling more than 6 GW.

Working on Pre-Bid design and commercial evaluation for Abu Dhabi Solar Battery Energy storage project 300MWh for Neon project.

Successfully completed 1 MWh of Energy Storage project at Andhra Pradesh, India with 4 battery technology, LFP technology CATL, ESS battery flow technology, BENAN battery LFP, LTO technology.

### **Previous Experience**

Sep'97 - Jan'07: Shree Cement, Beawar, Rajasthan as Asst. Engineer (Instrumentation)

### **Certifications / Trainings**

Certified in Solar Energy from DELFT University of Technology, Netherlands
L-3 Certification for Conext Core XC Series Inverter Service and Commissioning Training Energy
Management Professional from Schneider Electric E-Learning
Lean 6 Sigma Black Belt from Schneider Electric E-Learning Cyber
Security Certification from Schneider Electric E-Learning CPC10111
Certificate I in Construction - CPCCOHS1001A Discover Basic Motor
Protection Function Training
ICGF Cyber Security Certification

### **Publications**

Published articles in:

- Electronics for You in Mar'16 for AC & DC Fuse
- The Institution of Engineers (India) in Mar'19 on Grid Management in a Multiple Resource Scenario.

# **Knowledge Preview**

Knowledge on PVSyst, AutoCAD, Metonorm, Sketchup pro, TOPOGRAFIX, ModSoft, Concept, PLC7 Pro, Unity Pro, Vijeo Citect, SCADA Expert, I-Fix, RS View, RS Logix, Power SCADA, and so on PLC Working on Schneider 984 Series, Quantum, Premium, Momentum, M340, M580, M221, M241, M251, and so on Communication Protocol – RS232, Modbus RTU, Modbus Plus, Modbus TCP I/P, Ethernet, Profibus, Can open, XAN Bus, IEC 101, IEC 103, IEC 104, IEC 61850, and so on Power System Design as per IS/IEC/UL standards (SLD, load analysis, Protection & Monitoring and DC System) Expertise in Thermal Analysis, fault analysis, Fault finding, RCA, Solution (Electrical / Mechanical / Instrumentation) Industrial Networking, IT Infrastructure, Software Installation, Network architecture, Network Configuration.

### **Personal Details**

Date of Birth: 6<sup>th</sup> August 1975

Mailing Address: C-804, Confident Aquila, Sompura Gate, Sarjapura Road, Bengaluru – 562125

Languages Known: Hindi and English, Passport No.: L8794759 (Valid till 12/04/2024)

### **Annexure**

### Projects Undertaken

#### **Solar Projects:**

TATA BP Solar

Astonfield 11 MW Gujarat SD 11.5 MW Rajasthan

NSSPL Punjab AIC Bihar Project Azure 5 MW Rajasthan Azure 30 MW Chhattisgarh Azure 35 MW Gujarat Vartol

Hindustan Project 25 MW Todarpur, Punjab

Hindustan Project 36 MW Karnataka

Clean Solar 20MW

Aditya Birla 60MW (20MW + 20MW + 20MW)

Fourth Partner 8.5 MW Rajasthan RJ600 -850 MW Badla Project (O&M) AP250 -450 MW Kadri (O&M)

Pokran 300 - 450 MW

Astonfield 5 MW Rajasthan SD 5 MW Rajasthan Valulab 8.5MW

Essel 65 MW (20MW+20MW+20MW+5MW)

Azure 100 MW Rajasthan Azure 130 MW Karnataka Azure 35 MW Gujarat Chiddra

Hindustan Project 25 MW Sherkhan, Punjab Hindustan Project 23 MW Mahoba UP

Hero 43 MW MP

Today Home 70MW Karnataka

(20MW+20MW+10MW+10MW+10MW)
Essel 200 MW (40x2MW UP), (40x3MW Orissa)

Fourth Partner 11.5 MW Rajasthan AP350 - 450 MW Gani Porject O&M) KA200 - 300 MW Pawageda (O&M)

SB Energy Innovation Center 3 MW (2 MW Solar 1 MW Storage)

#### **Process Plants:**

Giral Lignite Power Plant, Rajasthan

BARC Mysore, DCS – I & II SCADA and PLC Programming

Commissioned

Amul Plant (Banas Dairy) Palanpur, Gujrat Powder Plant Lafarge Cement Plant Commissioning at Sonadhi Raipur

Chhattisgarh

Shree Cement Limited Unit – II (Project and O&M)

NTPC Dadri EMS Commissioning

NTPC Kehalgaon, Stacker and Reclaimer commission Amul Plant (Banas Dairy) Palanpur, Gujrat MLP-I

Heavy Water Plant, Vadodara Sarda Energy & Minerals Ltd., Raipur

Shree Cement Limited Unit - I (O&M)

#### Data Center

AWS – SKID Package – Hyderabad Site (4 Phases)

Prefab DC- ISO- Bangladesh - (as Project Leader & Consultant Interaction)

Airtrunk Australia & Hongkong OCADO – USA (28 & 58kW)

Medium Offer ranges from (10-250kW)