**Experience**: 16+ years of experience in Chemical, Oil & Gas, Automation and Cement industry

**Management**

1. Planning, progress reporting, scheduling, man hour and capital cost estimation and prepared project execution plans.
2. Conducted training programs for GET’s, interns during on-boarding.
3. Mentored GET’s as well as experienced resources through a mentor-mentee program for over 6 years
4. Attend PMP course (2016-2017)

**Engineering**

* Automation, Control, and safety system engineer with work experience with End users, EPC’s and automation vendors. Worked on vertical integration of DCS data to ERP (SAP).
* Exposure to Manufacturing 4.0
* Developed process control strategy document (functional requirement specifications) for control systems (ABB / MOD5), identify LOPA scenarios and implement required SIF’s in safety system.
* Implement control strategies and simulation for process from design specification.
* Generate project documentation for projects, prepare and compile scope of work, BOM, RFQ’s & Engineering deliverables (like P&ID, IO list, Control Narrative / Cause & Effect, Instrument index, Instrument Datasheet, JB & Cable schedule, Instrument interconnection and Loop drawings etc.,)
* Ability to handle the project from FEED phase to hand over to client operations’ team.
* Hands on experience working on DCS, ESD and F&G systems
* Strong knowledge of international safety standards IEC 61508, IEC 61511, ISA88 and ISA95.
* Site survey and site construction work experience in chemical, petrochemical, cross country gas pipeline projects and in Cement industry projects.
* Participated in HAZOP with M/s Exida.
* Hands-on project experience with various automation systems like Yokogawa, ABB, Triconex on various projects.
* Proven ability to work in multi-cultural / multi-lingual environment with end-users’, instrumentation (EPC) contractors and main automation contractors (MAC).
* Sound knowledge of system configuration of Yokogawa Prosafe-RS and Centum VP

**Certification**: TUV certified Functional Safety Engineer. (TÜV Rheinland, #6567/13, SIS)

**Employers:**

1. Dow Chemical Company From Mar 2016 to present day
2. Yokogawa India Limited, Bangalore From Jan 2012 to Oct 2015
3. Kaz Stroy Service, Kazakhstan From Dec 2009 to Dec 2011
4. Almeer Technical Services Co., Kuwait From June 2008 to Nov 2009
5. India Cements Limited, Dalavoi From Aug 2006 to Jun 2008

**Dow Chemical Company – Chennai**

As: **Senior Process Automation Engineer for DCS & SIS**

**Responsibilities:**

1. Worked on batch and continuous plants on various automation projects
2. Strong skills on vertical integration of data flow from DCS to ERP (SAP) systems using OREM (Order and Recipe Execution Management), Siemens Opcenter EXPR systems
3. Interact with process plants to understand the requirements and generate design specification (called as PCSD).
4. Review of existing PCSD’s to close GAPs as per LOPA
5. Implement control strategies in ABB / MOD5 systems (legacy DCS).
6. Simulation coding and testing of DCS / SIS codes

**Yokogawa India Limited, Bangalore, India**

As: **Lead Engineer for SIS** (Prosafe-RS, R3.02)

Position: Asst. Manager

**Responsibilities**:

Close interaction with EPC’s for design inputs like P&ID, IO list, C&E matrix, Process / Control narrative etc.,

FEED: Site survey, Generation of system architecture, Support to sales team in technical proposal.

Basic Engineering: Generation of documents include, but not limited to,

1. Hardware and Software Functional design specification
2. Safety Validation Plan
3. Typical cabinet design (System, Marshalling, Network/Server)
4. Typical loop design (Hardware & Software)
5. Typical console design
6. Tag naming philosophy, Grounding scheme, Data exchange procedures

Detailed Engineering & Testing:

1. Generation of cabinet GA/IA drawings, BOM, IO Allocation, IO wiring schedule (cross wiring),
2. Logic development using C&E matrices, process / control narratives / startup shutdown procedures. Configuration of SIS for safety system communication / DCS & 3rd party communication
3. Power & Heat load estimation, Fan sizing (by air flow calculations)
4. Pre-FAT, FAT & IFAT.

Functional Safety Management:

1. Compliance to FSM procedures through the use of SIS check sheets (SIS-1 to SIS-7)
2. Safety Validation planning
3. Management of change by Impact analysis

Project management:

1. Planning (Work Breakdown Structure)
2. Progress reporting
3. Participate in CKOM (with customer) & IKOM (with sales)

Projects executed:

1. Iraq South Gas Utilization Project End User – Basrah Gas company, Iraq

Company - **Shell**

MAC- Yokogawa, Dubai as Core team Lead SIS engineer

Process – NGL, Dehydration, Storage etc.,

1. Yanbu Export Refinery Project End User – Aramco, Saudi Arabia

EPC- Technicas Reunidas, Spain

MAC – Yokogawa, Singapore as Lead SIS engineer

Process – Delayed Coker Units (Furnace – BMS)

**KazStroy Service, an EPC contractor in Kazakhstan**

As: **Instrumentation and Control Systems Engineer**

Project: **Uralsk Gas Pipeline Project** (UGPP) for Karchaganak Petroleum Operation (KPO) b.v

**Responsibilities:**

1. Engineering for Remote Terminal Units (SCADA - 17 No.s), Gas Pressure Reduction System (GPRS), Gas Metering System (GMS) along the 142km long pipe line between Novenky tie-in point and KPC terminal.
2. Construction and commissioning of Remote Terminal Units
3. Integration of installed RTU’s with the existing RTU’s through fiber optic network.

**Jobs Handled**:

Engineering:

1. Preparation of basic & detailed engineering documents like Cause & Effect Matrix, I/O list, loop wiring diagrams, Instrument interconnection diagrams, Instrument Index, Cable schedules, Material take-off, Graphics mark up from P & ID, General arrangement drawings.
2. Reviewing and commenting of Vendor documents like IO allocation, Cabinet & kiosks general arrangement drawing, cabinet and kiosk power distribution drawings, Network architecture for third party integration (serial links), generation of reports, trends and mimics.
3. Development of Network architectures to connect new RTU’s to the KPO’s existing fiber optic network
4. Preparation of datasheets.

Construction and Commissioning

1. Attended FAT at vendors’ premises and conducted SAT onsite for all the RTU’s.
2. Commissioning of SCADA systems, GPRS, GMS and GMASS at site
3. Co-ordination with Vendor and KPO (Client) for execution of UGPP

Systems:

1. GPRS/GMS – Belleli Engineering, Breda Energia
2. GMS – Daniel
3. GMASS – Emerson
4. Analyzer – ABB, Telford
5. SCADA – ABB, St. Neots

**Almeer Technical Services Company, an EPC contractor in Kuwait**

As: **Instrumentation and Control systems Engineer**

for **Modernization of Obsolete Instrumentation Project** (MOIP) Phase - 1 for Kuwait National Petroleum Company (**KNPC**), MAA refinery, Kuwait.

**Responsibilities**:

* 1. Commissioning of DCS & ESD in Bitumen & Eocene units.
  2. Commissioning of Invensys ESD in different plants within KNPC.
  3. Integration of DCS - 7 Workstations on Mesh network from Node network.

**Jobs Handled:**

1. Engineering:
   1. Preparation of Engineering documents like Cause & Effect Matrix, I/O list, loop wiring diagrams.
   2. Preparation of Logic drawings for ESD’s from Relay logic diagrams.
   3. Design & Engineering of Matrix Panels & hardwired consoles.
   4. Design and Review of DCS graphics and group displays.
   5. Reviewing and commenting of Vendor documents.
   6. Preparation of Change orders, Scope changes (addition/deletion).
   7. Development of Network architectures to connect various LCP’s and SIH’s to CCR’s
   8. Preparation of graphics for Display Wall system (BARCO) from PFD’s & P&ID’s.
   9. Preparation of datasheets for transmitters for procurement.
2. Construction & Commissioning
   1. Involved in SAT, commissioning and loop checking in Bitumen and Eocene areas.
   2. Practical knowledge & implementation of Foundation Field Bus.
   3. Establishing network (fiber optic) for communication between the LCP’s to SIH’s and SIH’s to CCR’s.

**Systems:**

1. DCS - Emerson, Invensys
2. ESD - Invensys (Triconex)
3. Asset Management System – Emerson

**Other Activities:**

* 1. Participation in Design review meetings with KNPC
  2. Involved in CHAZOP study with M/s Exida
  3. Coordination of vendors’ onsite during commissioning of ESD/DCS’s.

**India Cements Limited, Dalavoi,**

As: **Instrumentation Engineer**

Projects Handled: 1. E.S.P erection and commissioning

2. Ball (Cement) Mill erection and commissioning

3. MMD Crusher erection and commissioning

4. S5 to S7 Conversion of Kiln & Coal Mill areas.

Role in Projects: 1. Preparation of I/O List, wiring/termination details.

2. Preparing Cable Schedules & Tray Layout.

3. Ordering & Procurement of material.

4. Coordination with vendor during commissioning.

Systems: 1.Siemens S 7, CFC programming

2. Siemens S 5, Statement List

**Educational Qualification:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Qualification** | **Institution/ University** | **Year of Passing** | **Percentage** |
| 1 | B.E  Electronics & Instrumentation | Vel Tech Engineering College,  Anna University | 2006 | 79.34 |
| 2 | Diploma in EEE | Chengalvaraya Naicker Polytechnic College | 2003 | 90.41 |

**Personal**

Date of Birth: 15th July 1984

Sex, Marital Status: Male, Married

Nationality: Indian

Can Speak, Read & Write English, Hindi, Tamil

Place: Chennai

R. Prasanna

Date: 15th Nov 2022.