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Instrumentation, Control and Automation Engineer with 20 years' Experience in EPC Project Engineering.

CAREER OBJECTIVES: *Eager for a challenging job in a reputed organization where I can gainfully utilize my experience in the field of design, detail engineering, erection & commissioning of instrumentation, control system, process automation & electrical control systems and grow with the team.*

Presently working in GE Power, Noida (Formerly known as Alstom India Ltd.). Self-have domain knowledge in Power Plant, AQCS & WFGD Instrumentation, control and Automation. Presently working in WFGD tendering and WFGD execution both, **winning team** member of NTPC-Telangana, NTPC-Lot-1A&1B tender (Solapur, Meja, Tanda and Unchahar), NTPC-Lot2 (Simhadri & Sipat) and NTPC-Jhajjar project, working as PEM in DVC-Durgapur, DVC-Meja & Raghunathpur tender and lot more. Now, working with GE Power, as Lead Engineer-Control Engineering in Wet Flue Gas Desulphurization, Fume Treatment Control, Fabric Filter and ESP related Environment Control System.

EXPERIENCE DETAILS

Tender Proposal Support:

Read and analyze tender document and drawing and review basic engineering, technical requirement, provide technical guidance to layout and C&I design, review performance parameters and deviation list, provide inputs to finalize division of work between consortium members in order to ensure complete & viable technical offer. Finalize the consolidated BOQ for tender cost estimation coordination with all department. I&C BOQ estimator for all WFGD tender. Review contract requirement and technical amendment, organize design review, provide guidance to cost effective solutions, set-up teams, review job progress, help obtain internal customer process approval in order to finalize process design inputs.

Detail Design & Engineering (Execution):

- Developed P&ID w.r.t technical contract requirement in consultation with process team.
- Developed Control & Operation Philosophy and Writeup for Complete WFGD Plant (Functional Control Description, FCD) w.r.t WFGD machine operation and P&ID and plant layout.
- Developed Block Logic Diagram (BLD).
- Finalization of DBR (Design Basis Report).
- Developed WFGD control system configuration diagram.
- Developed and review of plant layout and control room layout.

Curriculum Vitae

- Developed Standard Instruments Technical Specification and Standard Drawing.
- Preliminary technical discussion relevant to instrumentation and control system with client and consultant during finalization of the order.
- Responsible for basic & detail engineering of following drawings: DCS/PLC I/O list, Drive List, DCS/PLC system configuration, Instrument index, Data sheets, Instrument installation drawing (hook up), Cable schedule, JB details, Termination schedule, Loop schematic diagram, MCC/Control panel/Control desk schematics, LCS Schematics, Cable tray layout, I&C Earthing Scheme Drawing, LIE/LIR Location Drawing, JB/LCP Location Drawing and I&C Power Distribution Scheme Drawing.
- Preparation of datasheet of all field instruments and DCS/PLC as per technical specification.
- Technical discussion with DCS/PLC vendor during software development of DCS/PLC-SCADA system and finalization of I/O list.
- Design and detail engineering of DCS/PLC-SCADA system requirement engineering, Local Control Panel drawings, Control Desk drawing, Instrument Power distribution panel drawing, selection and sizing of cables, MCC interface drawing.
- Review instruments and control of Booster Fan, Oxidation Blower, Recycle Pump, Ball Mill, Vacuum Belt Filter, Material Handling Package and Water Pre-Treatment Package etc.
- Interface with customer/NTPC/EIL.
- Visit in inspection & FAT of all field instruments, DCS and PLC.
- Regular visit to NTPC/EIL/consultant for drawing approval.
- Regular site visit during installation & commissioning to sort out site specific problems.
- Developed Technical Training documents and provide training to customer/NTPC at site.

Procurement:

Review technical specification for major mechanical packages systems, review technical evaluation of major equipment to ensure compatibility with main deliverable – the WFGD. Evaluate competence of major component suppliers. Review technical specification of C&I items and review technical evaluation. Prepared techno-commercial comparison sheet (TTA) for I&C items procurement. Preparation of bill of material, technical discussion with vendors for bought out instrumentation, control and mechanical packages items and acted for procurement of instrumentation items.

Site Installation:

- Planning and scheduling of resources & prepare erection schedule for timely completion of the project. Preparation of bar charts for instruments erection activities.
- Supervision of execution of installation of PLC/DCS panel including system and marshalling panel, Large video screen set-up etc., HART management system set –up, Server –client base architecture set-up and OPC server set-up, Back-up panel set-up, UPS set-up and relay panel set-up and GPS system.
- Supervision of execution of cable tray routing, proper JB installation, cable laying, termination work and related structural works.

Curriculum Vitae

- Supervision of execution of proper instrument installation work, like flow, level, pressures and temperature smart transmitter installation as per hook up drawing and site condition. Different types of switch, gauges and other panel mounted instruments installation.
- Close coordination with piping and mechanical departments for finalizing tapping points for pipe mounted instruments and duct-silo mounted instruments.
- Supervision of execution of installation and cabling of instruments control panel. Sensors of automatic machines.
- Supervision of bench calibration of all field instrumentation items like smart transmitter (temp, flow, pressure, and level), Control valve, Pressure release valve (PRV/SRV), RTD, T/c, switches and gauge/indicator etc.
- Involve and responsible for proper instruments hook up, hydro testing of pipe/tube line, cable continuity testing (from sensor to PLC I/O cards), loop testing of field/panel mounted instruments.
- Preparation of all field tests reports like instruments installation reports, hydro test reports, calibration reports, megger test reports and loop test reports.
- Communication with H.O. for drawings, documents and material dispatch status and site progress report.

Commissioning Support:

Visit site to ensure CLCS and OLCS logic implementation and functional during commissioning. Day-to-day support site commissioning team to solve site specific problem arise during commissioning. Organize technical support and training to commissioning team at site, support in delivering technical lectures, preparation of O&M documentation and all necessary support to smoothly commission and hand-over unit leading to ensure successful contract closure. Involve in commercial closure of NTPC-Vindhyachal (1X500 MW), WFGD project.

- Preparation of bar charts for instruments commissioning activities.
- Power-up, testing and commissioning of Server-Client based DCS architecture, DCS hardware, SOE system and LVS Alarms, System Hardware, Battery Charger, ACDB, UPS and Back-up panel and Hart management system and GPS system.
- Commissioning of OLCS and CLCS loop of power plant.
- Control schematic checking of MCC, AC Drives, DC Drives and Local Control Panel.
- Power up, testing and commissioning of PLC panels, Drive panels, LCP's, Power panel etc.
- Power up, testing and commissioning of sensors, smart transmitters, controllers and switches.
- Checking, testing, and commissioning of individual machines with Indian/foreign M/c. vendor.
- Checking of pre commissioning documentation like instruments installation report, hook up drawing, A/QC report, hydro test report, data sheet, megger test report, calibration report, wiring diagram, and control schematic
- Wiring, Calibration and testing of Coriolis Mass Flowmeter Electromagnetic Mass Flowmeter and Radar type level smart transmitter and LVDT type Mass Flowmeter.

Curriculum Vitae

- Leads DCS/PLC I/O checking (DI, DO, AI, AO) activities.
- Leads CLCS commissioning of power plant like drum level, SH attemperator, Furnace draft control etc.
- Development of DCS/PLC application software as per control philosophy supplied by client & developed SCADA system as per client requirement.
- Close coordination with software vendor and foreign package representative for on-site software modifications.
- Responsible for carrying out no load & on load testing of individual machine (like motors, heaters, coolers, mixer, roll mill, ball mill, screw & belt conveyer and screening m/c etc.) and individual system.
- Responsible for carrying out of control circuit and power circuit checking of AC Drives and DC Drives and power up, parameter setting & no-load test run of AC Drives and DC Drives.
- Involved in pre-commissioning and commissioning checking of different systems with client/technologist.
- Involved in commissioning with client and consultant during every phase of commissioning.
- Coordination with other package contractors/vendors for freezing interface details among the systems and implementation of the same.
- Conduct FAT in presence of customer.
- Involved in SAT of DCS/PLC's with consultant and clients.

Quality:

Analyze & resolve process NCRs received to fulfill design and contract requirement. Support QA team to solve engineering issues arise during inspection. Visit supplier/vendors shop floor for inspection. Involved in supplier registration process.

Development:

Organize development of internal standards & procedures, initiate design improvements in order to ensure cost & cycle time reduction, maintaining / improving the product quality.

People Management:

Lead, guide subordinates and peers, recognize & recommend for performance, identify & recommend fulfillment of training needs to ensure development of a cohesive, motivated high-performance team.

Customer Support:

Ensure cost effective, quick resolution of technical complaints/question raised by customers during project execution to ensure customer satisfaction. We received NPS (Net Promotor Score): 9/10 from NTPC during PLC FAT at GE office.

Curriculum Vitae

EMPLOYMENT RECORDS

Sl. No.	Employer	Period	Duration of Service	Designation
1	GE Power/ Alstom India Ltd, Noida	01 st Nov'2015 to till date	Continue	Lead Engineer – Control Engineering
2	Alstom India Ltd, Noida	07 th May'2012 to 01 st Nov'2015	Continue	C&I Manager-Design & Engineering
3	KSK Energy Ventures Ltd, Hyderabad	11 th May'2009 to 5 th May'2012	3 years	C&I Manager-Design & Engineering
4	ABB Ltd, Bangalore, MNC	14 th March'2006 to 6 th May'2009	3 years & 3 months	Engineering Manager -Engineering & Commissioning
5	Rockwell Automation India Ltd, MNC (Allen Bradley)	1 st August'2004 to 13 th March'2006	1 year & 8 months	Project Engineer
6	TATA Honeywell Ltd, MNC	12 th April'2004 to 31 st July'2004	4 months	Engineer Project
7	Mukand Engineers Ltd, ISO9001: 2000 Company	From May,1999 to 10 th April'2004	5 years	Instrumentation Engineer

Curriculum Vitae

MAJOR PROJECTS EXECUTION

Organization : M/s. GE Power, Noida

Sl. No.	Project Under-Execution	Principle Engineer	Owner Consultant	Brief Job Description
1	Wet Flue Gas Desulphurization (FGD), NTPC-Jhajjar (3X500 MW)	M/s. GE India	M/s. NTPC	Finalization of WFGD Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review, Earthing & Power Distribution Scheme etc.
2	Wet Flue Gas Desulphurization (FGD), NTPC-LOT1A&LOT-1B SOLAPUR (2X660 MW) TANDA (2X660 MW) MEJA (2X660 MW) UNCHAHAR (1X500 MW)	M/s. GE India	M/s. NTPC	Finalization of WFGD Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review, Earthing & Power Distribution Scheme etc.
3	Wet Flue Gas Desulphurization (FGD), NTPC-LOT2 SIPAT (3X660 MW) SIMHADRI (4X500 MW)			Finalization of WFGD Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review, Earthing & Power Distribution Scheme etc.

MAJOR PROJECTS EXECUTION

Organization : M/s. GE Power, Noida/Alstom India Ltd., Kolkata

Sl. No.	Project Under-Execution	Principle Engineer	Consultant	Brief Job Description
1	Wet Flue Gas Desulphurization (FGD), NTPC-Telangana (2X800 MW)	M/s. GE India	M/s. NTPC	Finalization of WFGD Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review, Earthing & Power Distribution Scheme etc.
2	Wet Flue Gas Desulphurization (FGD), NTPC-Vindhyachal STPP Stage-V (1X500 MW)	M/s. Alstom, Kolkata/USA	M/s. NTPC	Finalization of WFGD Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review, Earthing & Power Distribution Scheme etc.
3	Fume Treatment plant for Existing Anode Baking Furnace#1 at NALCO, Angul	M/s. Alstom, Kolkata/Sweden	M/s. EIL, Delhi	Finalization of Control System Configuration, Tech. specification of various Instruments, Calculation, Mechanical package review etc.
4	Stock House Dust Extraction System at Rastriya Ispat Nigam Limited's (RINL) Vizag steel plant	M/s. Alstom, Kolkata/Sweden	M/s.MN Dastur, Kolkata	Finalization of Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review etc.
5	Stock House & Cast House Dust Extraction System at NMDC	M/s. Alstom, Kolkata/Sweden	M/s. MECON, Ranchi	Finalization of Control System Configuration, Functional Control Description, Logic & HMI Development, P&I Drawing, Layout, Tech. specification of various Instruments, Calculation, Mechanical package review etc.

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MAJOR PROJECT EXECUTION

Organization : M/s. KSK Energy Ventures Ltd, Hyderabad

Sl. No.	Project Under-Execution	Principle Engineer	Consultant	Brief Job Description
1	6x600 MW Sub-critical Mega Power Project. Akaltara, CG.	M/s.SEPCO, China	M/s.DCPL, Mumbai	Finalization of Plant Control System Configuration, DBR, P&I Drawing, Layout, tech. specification etc of BTG and BOP Area.

MAJOR PROJECTS HANDLED

Organization : M/s. ABB India Ltd, Bangalore

Sl No.	Project Executed	Technologist	Consultant/ Client	Brief Job Description
1	1X200 MW KTPS, WBPDC, Kolaghat(R&M)	M/s.PDCL	M/s.PDCL	Established Server-Client based DCS Configuration, Commissioning of OLCS & CLCS Loops, SOE and LVS Alarms. System Hardware, Battery Charger, ACDB, UPS and Back-up Panel Power –up, Testing and Commissioning.
2	6X210 MW VSTPP, NTPC, Vindhyachal (R&M)	M/s.NTPC	M/s.NTPC	Established Server-Client based DCS Configuration, Commissioning of OLCS & CLCS Loops, SOE and LVS Alarms. System Hardware, Battery Charger, ACDB, UPS and Back-up Panel Power –up, Testing and Commissioning.
3	2X200 MW SSTPP, NTPC, Singrauli (R&M)	M/s.NTPC	M/s.NTPC	Established Server-Client based DCS Configuration, Commissioning of OLCS & CLCS Loops, SOE and LVS Alarms. System Hardware, Battery Charger, ACDB, UPS and Back-up Panel Power –up, Testing and Commissioning.
4	3X200 MW FSTPP, NTPC, Farakka (R&M)	M/s.NTPC	M/s.NTPC	Established Server-Client based DCS Configuration, Commissioning of OLCS & CLCS Loops, SOE and LVS Alarms. System Hardware, Battery Charger, ACDB, UPS and Back-up Panel Power –up, Testing and Commissioning.
5	2X210 MW TNEB, Mettur	M/s.TNEB	M/s.TNEB	Development of CLCS logic, tested and simulates and conducting FAT with TNEB.
6	6x120 MW CPP NALCO	M/s.NALCO	M/s.NALCO	Development Furnace Safeguard Supervisory System (FSSS), tested and simulates and conducting FAT with NALCO.
7	2X500MW NTPC-Sipat & 3X500MW NTPC - Kahalgaon	M/s.NTPC	M/s.NTPC	Development of CLCS logic, Tested, Simulates and conducting FAT (Logic) with NTPC.Troubleshooting at Site.
8	2x80 MW Renusagar Power Industries.			Established Server-Client based DCS Configuration, Commissioning of OLCS & CLCS Loops and System Hardware Power-up, Testing and Commissioning.

M/s.NTPC

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Organization : M/s. Rockwell Automation India Ltd, Sahibabad,UP

Sl No.	Project Executed	Technologist	Consultant/Client	Brief Job Description
1	RMHS Plant, JSPL		M/s.MECON, Ranchi	Logic/HMI development, Panel testing, conducted FAT, system commissioning at site.
2	KILN and WHRB, JSPL		M/s.JSPL, Raigarh	Logic/HMI development, Panel testing, conducted FAT, system commissioning at site.
3	Electric Arc Furnace, JSPL	M/s.SMS Demag Ltd, Delhi	M/s.SMS Demag Ltd, Delhi	Logic/HMI development, Panel testing, conducted FAT, system commissioning at site.
4	DM/RO Plant at TISCO, Jamshedpur	M/s.Vatecch Wedag Ltd, Germany	M/s.TISCO	Logic/HMI development, Panel testing, conducted FAT, system commissioning at site.
5	DM/CPU/TTP/RO Plant, IOCL	M/s.Vatecch Wedag Ltd, Germany	M/s.EIL/ M/s.IOCL, Panipat	Logic/HMI development, Panel testing, conducted FAT, system commissioning at site.
6	Green Anode Plant in BALCO Smelter Expansion	M/s. KHD, Germany	M/s.BALCO	Logic/HMI development and system commissioning at site.

Organization : M/s. TATA HONEYWELL India Ltd, Pune

Sl. No.	Project Executed	Technologist	Consultant/Client	Brief Job Description
1	Access Control System, IOCL	M/s. THL	M/s. THL/ M/s. IOCL	Drawing/documents/BOM preparation after site visit.

Organization : M/s. Mukand Engineers Limited, Bombay

Sl. No.	Project Executed	Technologist	Consultant/Client	Brief Job Description
1	Sinter Plant in NINL	M/s.AERIMI China	M/s. MECON/ M/s. NINL	Field instrument installation and commissioning, System installation, power-up and commissioning at site
2	Green Anode Plant in NALCO Smelter Expansion (LSTK)	M/s. KHD, Germany	M/s. EIL/ M/s. NALCO	Field instrument installation and commissioning, System installation, power-up and commissioning at site
3	Slag Granulation Unit (Copper) (LSTK)	M/s.BCH (Boleden), Sweden	M/s. EIL/ M/s. SWIL	Field instrument installation and commissioning, System installation, power-up and commissioning at site
4	Waste Heat Recovery Exchanger for Hot Oil (LSTK)		M/s.EIL/ M/s.GAIL	Field instrument installation and commissioning, System installation, power-up and commissioning at site
5	VDU and FCC Unit (Shut down work)		M/s.EIL/ M/s.IOCL, Mathura Refinery	Field instrument installation and commissioning at site
6	LPG Recovery Unit and Utilities		M/s. EIL/ M/s.GAIL, UPPC, Pata.	Field instrument installation and commissioning at site

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Personal Data

Academic Qualification				
Exam. Passed	Institute/University	Year of Passing	% Of Marks	Division
B.E. Instrumentation	Jadavpur University, Kolkata	1998	76.0 %	First class with Honors.
10+2 std.	Modern School, Kolkata	1993	75.6%	First Division with distinction
10 std.	SCSI, Kolkata	1991	74.0%	First Division
Date of Birth		11.04.1974.		
Nationality		Indian		
Marital Status		Married		
Languages conversant with		English, Hindi, Bengali.		