**Muhammad Zeeshan Hanif**

**Local to California (Willing to relocate to Fort Lauderdale, FL)**

**Summary**

* Professional Electrical Engineer with 6+ years of experience in Electrical Power System & Instrumentation Control Design Engineer.
* Integrated PLC (Programmable Logic Controllers) and DCS (Distributed Control Systems) to optimize control system performance
* With significant expertise in Control Systems Hardware Design, I specialize in wiring diagram design and electrical

schematic preparation using EPLAN.

* Provide direction to CAD designers to create wiring and assembly drawings for generator paralleling switchgear and control
* Worked closely with project managers and electrical team members to deliver the final design
* Successfully led a team of electrical hardware design engineers, ensured high-quality outcomes, and fostered an

environment of innovation.

* Adept troubleshooting skills with a history of success contributing to reliable electrical system design, power system integration, testing, and implementation to required specifications.
* Proficiency in EPLAN and AutoCAD, along with a strong command of various electrical design tools.

**Employment History**

**Siemens, New York Dec 2023 - Present**

**Electrical Engineer-Commissioning (Switch Gear Design & Control Automation System)**

* A commissioning project engineer reports to a team leader and is responsible for the delivery and execution of professional services tasks for equipment in mechanical, electrical, plumbing, and associated systems.
* Primary activities include completing office assignments, time and expense management, in-field installation validation, field observation reports, functional performance testing, meeting attendance and documentation, on-site and factory witness testing, submittal reviews, and design documentation evaluation.
* Additional activities include executing target billable hours, managing tasks within the time budgeted, leading cx meetings, assisting the construction team with identifying/solving technical issues when they arise and maintaining positive relations with existing clients on assigned projects.
* Administrative activities include supporting the team leader in coordinating with other project engineers and senior project engineers regarding weekly staff scheduling, training/mentoring team members on proper documentation, field procedures, and equipment usage, and participating in the company-wide safety and training programs.Design, test, and commission custom switchgear and generator control systems
* Execute and support the design, test, manufacture, and commissioning of low and medium-voltage switchgear that controls multiple generators parallel to one or more utility sources
* Provide direction to CAD designers to create wiring and assembly drawings for generator paralleling switchgear and control
* Designed and specified instrumentation for various industrial processes, ensuring compliance with industry standards and project requirements.
* Created detailed instrumentation data sheets, control valve sizing calculations, and technical specifications.
* Integrated PLC (Programmable Logic Controllers) and DCS (Distributed Control Systems) to optimize control system performance.
* Supervised the installation and commissioning of instrumentation systems, ensuring proper calibration and functionality.
* Conducted FAT (Factory Acceptance Testing) and SAT (Site Acceptance Testing) to validate system performance.
* Performed troubleshooting and maintenance on control systems and instrumentation, minimizing downtime and ensuring operational efficiency.
* Developed and implemented preventive maintenance plans for critical instrumentation and control equipment.
* Generated technical reports and procurement packages for instrumentation equipment.
* Interacted with vendors to procure instrumentation equipment, ensuring technical specifications and project requirements were met.
* Evaluated technical bids and prepared bid tabulations for vendor selection.
* Utilized software tools such as Smart Plant Instrumentation (SPI), AutoCAD, and Visio for designing and documenting control systems.
* Developed control logic and programming for PLC systems using platforms such as ControlLogix and SLC 500.
* Implemented process control strategies to enhance system efficiency and performance.
* Analysed process data to identify areas for improvement and recommended instrumentation upgrades.
* Developed and specified instrumentation data sheets, ensuring accurate and reliable measurements for various industrial processes.
* Designed control system architectures integrating PLC and DCS systems to enhance process automation and control.
* Managed the installation and commissioning of instrumentation systems, ensuring compliance with safety standards and project specifications."
* Coordinated with vendors to procure high-quality instrumentation equipment, ensuring adherence to technical specifications and project requirements.
* Interact with internal and external customers, accomplishing project milestones
* Create a bill of materials for generator paralleling switchgear controls in the ERP system
* Create PLC programs for control of generator paralleling switchgear
* Execute multiple projects simultaneously Responsible for testing, evaluating, modifying, and calibrating products and instruments.
* Responsible for analysing plant processes, design, and implement improvements.
* Troubleshoot issues with hardware and processes.
* Analyse project requirements and perform technical calculations supporting design including electrical requirements, robotic safety standards, and motor controls.
* Ensure all relevant safety objectives and legal requirements are observed for all work completed. Provide submittal packages to our organization’s customers on medium and low-voltage switchgear.

**IEH Department Germany Stuttgart August 2021- March 2023**

**Instrumentation Engineer**

* Carried out design calculations for high voltage 115kVA sub-stations, groundings, relay setting, faults& short-circuit system.
* Remodeled & retrofitted the distribution substation layout by applying an efficient design that brought down the cost by 15%.
* Supported the execution of 132/33kV SS (extension)transmission line and distribution feeders’ expansion project.
* Applied engineering application software to complete engineering tasks such as transformer sizing, testing, and commissioning.
* Performed preventive maintenance & commissioning of high& medium-voltage substations, transformers, and circuit breakers.

**Alfanar Construction Company, Saudi Arabia Jan 2019- March 2021**

**Maintenance and Testing Engineer**

* Responsible for the electrical scope to ensure the Contractor team completed installation, testing & commissioning of 115kV GIS, power transformer, reactor, station transformers, AC/DC auxiliary panels, lighting panels, control, and protection relay panels, etc. as per NEC and IEEE standards. Coordinate with other Site Teams (Civil and Mechanical) and Coordinators to ensure adequate HSE, Construction, and Execution. Leading a group of Electrical Engineer & Inspectors.

**Mehran Commercial Enterprises Pakistan (Automobile sector (Suzuki Company) Sep 2016 –Dec 2018**

**Electrical Control Engineer**

* Supervision, Installation, and maintenance of electric motors, transformers, generators, LV, and ATS Panelboards.
* Worked in Oil Gas/Petrochemical/chemical process engineering projects
* Developed equipment concepts based on product specifications, process control requirements, component selection, control architecture, cost, limits
* Designed Power Distribution System using Eplan Electrical P8 CAD system and followed NFPA79, IEC 60204-1, UL 508A Standards
* Designed Safety Interlock System using ISO 13849-1 requirement and selected appropriate components
* Implemented control reliable safety systems for robots, gantries, conveyors, and other high-volume manufacturing equipment according to UL1740, and ISO 10218 standards
* Managed and directed technicians to implement electrical works
* Defined system interconnect/schematic and Key control/automation components
* Coordinated with peers in other engineering groups to ensure design consistency and meet requirements
* Worked closely with project managers and electrical team members to deliver the final design
* Organized and managed vendor on control-related deliverables and ensured compliance with regulatory, Tesla Standards, and equipment specification
* Enforced application of Tesla standards and managed suppliers during specification, design review, and design approval
* Handled the electrical system control and power-related issues
* Implementation of planning schedule on-site and solving the problems to achieve goals planning and forecasting of site work for the procurement process.
* Ensures that tests and inspections are performed, witnessed, and documented by approved procedures

**Education**

* Westcliff University California Irvine CA.May. 2023 –Dec. 2024, Master of Science in IT
* Sapienza University Italy Jan 2021 – Dec 2023, Master of Science in Electrical Engineering (Power & Control systems) | GPA 4.0 CGPA 3
* NED University Karachi Pakistan Jan. 2016- Bachelor of Technology Electrical & Electronics Engineering

**Skills**

**Software:** AutoCAD, Revit, Matlab, Microsoft Visio, Eplan, Primavera

**Skills**: SCADA Automation, HMI, RTU, Relay Setting, FAT Testing & Commissioning, Transformer, Substation Design,PLC,Arc Flash, Short Circuit/Load flow/Coordination Study, Energy Storage, Troubleshooting, SEL Protocol NFPA70E, NEC Code,Project Management,Schematics.

**Skillful in Electrical Construction Management:** Material Planning, Procurement, Demand management, Sourcing, Vendor development, Capacity Planning and scheduling, Developing Suppliers' capability, ERP Systems, and Warehouse Management.