ARNOLD B. PLANA

Augusta, GA 30909

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SUMMARY OF QUALIFICATIONS

Extensive Experienced Electrical Engineer with strong managerial and supervisory skills coupled with a firm commitment to seeing tough jobs through to completion with a focus on profitability through value engineering. Recognized for performing work accurately with attention to detail, analyzing purchased quantity against actual installation; and for abilities in cost estimating, designing and improving electrical processes, and managing projects successfully with a goal of bringing value to a company through knowledge, initiative and teamwork. PLC programming, and automation concepts. Specialize in project design manufacturing design improvements and team leadership. Comprehensive knowledge of industrial control concepts like analog and digital signal processing, RS232 and Ethernet communications protocols.

Key Strengths:
Electrical Engineering, Supervising, Estimating, Design, Programming, Safety, Operations, Project Management, Analytical Skills, Negotiations, Leadership Skills, Team Building, Team Management, and Planning/Coordinating.

TECHNICAL SKILLS:

Knowledgeable in RS logic/Studio 5000, Estimation Logistic program, MS Office tools, AutoCAD 2010, ENOVIA, Oracle, Lotus Notes, SAP, Creo, SQL.

PROFESSIONAL EXPERIENCE:

John Deere – Grovetown, GA **2018 to present**
Manufacturing Engineer – Factory Automation

Responsible for changes to control logic and software including, but not limited to: relay ladder logic, PLCs, HMIs, and PC based logic
Designed and installed new PLC equipment to meet all plant objectives and goals, including troubleshooting
Worked with Quality, Manufacturing Engineering and Factory Automation Leads to ensure manufacturing and standardization goals are achieved.
Provided electrical designs, improvement, and programming CAN using FPT, RTT and JD Tester within applicable standards to build new or modify existing production machines and systems.

Worked with IT and Global Information Services (GIS) to ensure software policies are maintained and hardware that is used by Factory Automation is supported and that any network or database issues are expediently resolved.
Supported continuous improvement opportunities and activities
Established routings, methods, layouts, tools, costs, methods documentation, quality plans and labor standards for revisions to current operations and/or new parts or programs of limited scope. Identifies and implements cost reduction, quality, safety and ergonomic improvement ideas of limited scope. Works with electronic tools to perform engineering functions.
Investigated, gather, and analyze data for specifically assigned, recurring Electrical issues
Participated in team studies related to capacity, energy, productivity and efficiency
Implemented cost reduction, quality, safety and ergonomic improvement

GITI Tires – Richburg, SC **2017 to 2018**
Electrical Engineer

Responsible for maintaining, design and installation of electrical control systems, machinery and supporting equipment in the manufacturing facility, include equipment installations, modifications, retrofits, and development.
Modified existing equipment as per production or tech service requests
Managed contractors and service technicians assigned; plus, work with service technicians and plant management to improve equipment to meet specifically defined goals on uptime and productivity

Designed and installed new equipment to meet all plant objectives and goals
Manage/control capital and expense budgets in order to meet plant objectives
Communicated and coordinate between internal manufacturing, product development resources, external suppliers, and contractors to complete the project
Applied technical skills to all facets of the project (equipment specification, control system design/integration, process equipment checkout/startup)
Identified / evaluated new technologies that can be incorporated into the existing processes to improve yield, increase throughput, and/or reduce cost
Outstanding ability to work in digital and analog process control systems
Responsible for equipment safety and maintenance technical support
Determined cost of engineering, labor, equipment and materials for projects
Provided technical expertise in support of capital projects, process evaluation, and project modifications
Followed establish company and department policies, procedures, work instructions and safety and environmental guidelines
Performed all other duties of equal or less complexity as assigned or directed
Engaged and retain high-performance standards and elevate level of responsibility and performance
High knowledge of complicated electrical machinery and related equipment
Excellent knowledge of OSHA NEC and National Electrical Safety Code standards
Strong ability to troubleshoot PLC and VFD electronic control systems

CORNING – Midland, NC **April 2017 to November 2017 (Contract Completed)**
Electrical Engineer IV

Managed and takes the led in major electrical engineering projects
Performed highly responsible electrical engineering work in the field and office
Configured and integrated the standard Devicenet, CAN and Anybus
Developed low level device drivers for Air pressure and temperature sensors

Managed, leads and carries out major electrical engineering projects and programs
Led the development and revision of design guidelines, equipment criteria, construction standards details and specifications dealing with electrical equipment and service
Participated in the formulation of long-range facility plans and system improvement projects
Prepared electrical cost estimates for in-house engineering projects
Participated in the general preparation of project budget estimates
Interface with all departments, as necessary, to ensure efficient use and operation of equipment.
Performed Electro-mechanical troubleshooting, proficient with electrical schematics Motion control knowledge: servo, stepper, DC, AC drives.
Process variable understanding: flow, temperature, rate, pressure, level.
Thorough understanding of current loops.
Serial communication knowledge: RS232 / 485, Ethernet, IEEE-488
Direct initial equipment set-up and debug up to the point of turnover to operations.
Interface with all departments, as necessary, to ensure efficient use and operation of equipment.
Redline existing drawings and follow-up with drafting services or oversee draftsmen as required to resolve design issues.
Provided third-level troubleshooting support, directing contract engineers, techs, and trades as necessary to replace defective components and execute changes in design solve equipment/process issues

Huntsman – Augusta, GA **2014 to 2017**
Electrical Engineer

Served as the key technical resource in a newly built chemical plant from design, installation, construction, commissioning, operation, and maintenance.
Led for internal manufacturing improvement projects and overseeing electrical build and installation
Exhibit and practice Safety in Construction and Execution.
Assigned responsibilities of providing control system and process instrumentation engineering expertise for engines and digital controls systems
Company representative to the Safety culture and assure that all site personnel, including contractors, follow and practice the culture.
Designed, maintained, and improved the electrical instruments and systems, and assist in developing capital project programs**.**
Provided Electrical Engineering support to Maintenance and Operations.
Assigned responsibilities of supporting staff in designing controls systems including robotics, motion, vision, and SCADA
Developed and executes Preventive and Predictive Maintenance programs
Developed Standard Operating Procedures (SOP) and Guidelines.
Prepared and Implemented Management of Change (MOCs), Process Safety Management (PSM), and Job Safety Analysis (JSA).
Setup and Program Allen-Bradley's VFD and E3 overload relay required by the equipment.
Provided supervision and performance coaching and management to Instrumentation and Electrical (I&E) technicians.
Managed project engineering to determine the scope of work relative to the design intent of the company's needs.
Prepared Electrical equipment specifications, RFQ packages, and PO packages for process and material handling equipment.
Support Electrical, Instrumentation and Controls construction activity with clarification and/or technical support.
Participate in the procurement of Electrical, Instrumentation and Controls equipment including, bid clarifications with Vendors, bid evaluations and recommendations, Vendor approval document and drawing reviews.
Managed and coordinate the work to successfully complete the design of the Electrical and Controls portion of work for capital projects.
Modified and Improved the control systems including PLC, and interface systems to PLC's SCADA.

Supervised area of responsibility effectively to meet plant and Company objectives to include technical and coaching and development, monitoring of production performance, and focus team leadership.
Managed the startup and commissioning of Robotic Cells and labeler.
Complied the pertinent codes, governing regulations, and industry practices.
Implemented new designs and upgrades to control systems ensuring integration with plant wide systems.

GE Energy/Quest – Houston, Texas and Greenville, SC **2011 to 2014**
Electrical / Instrumentation Engineer

Led the electrical design of an Aeroderivative gas Turbine Package product line.
Developed new products & options for the gas turbine product line and maintain the standard designs, including the design of One Line and Three line diagrams, Wiring/Schematic Diagrams, loop Diagrams, and I/O list.
Developed schedule for NPIs with milestones and work tasks assignments for team.
Independently designed electrical layout of electrical cubicles that ensured optimized space and sizing including completing a 3D model of cubicles.
Complete development of electrical design system to ensure compliance in Electrical Code Application (NEC, IEC, CSA, UL, ATEX), area classification, and other certified areas, such as ABS.
Assured proper documentation of technical data generated for assigned projects and/or tasks consistent with engineering policies and procedures.
Provided timely communications on significant issues or developments to Engineering Managers and product line Leaders.
Directed initial equipment set-up and debug up to the point of turnover to operations.
Developed and execute detailed design to convert old legacy system, including but not limited to VIBRATIONS, FIRE AND GAS PROTECTION, GENERATOR PROTECTION, TURBINE CONTROLS, VOLTAGE REGULATOR, SYNCHRONIZING, FUEL, LUBE OIL, BATTERY SYSTEM.
Prepared presentation for design reviews to chief engineering office as required.
Provided installation and commissioning (I&C) field support, create field modification instruction for field reps.
Applied Engineering principles for the purpose of design, application, and commissioning of GE gas turbine package retrofit
Documented As-Built configuration, lessons learned, and update design standard through ECR process.

RAG Electric, Inc. – Los Angeles, CA **2008 to 2011**
Electrical Engineer

Independently prepared cost estimates by analyzing the materials and labor needed to complete projects.
Conferred with engineers, customers, and others to discuss existing or potential engineering projects.
Designed, estimated, implemented and improved electrical instruments, equipment, facilities components, products, and systems for commercial, residential and schools.
Directed and coordinated construction, installation, support, documentation, and testing activities to ensure compliance with specifications, codes, and customer requirements.
Performed detailed calculations to compute and establish construction and installation standards and specifications.
Inspected completed installations and observed operations that ensured conformance to design and equipment specifications, and compliance with operational and safety standards.
Planned and implemented research methodology and procedures to apply principles of electrical theory to engineering projects.
Oversaw project production efforts that ensured projects were completed satisfactorily, on time and within budget.
Prepared and studied technical drawings, specifications of electrical systems, and topographical maps to ensure that installation and operations conformed to standards and customer requirements.
Developed budgets and estimated labor, material, and construction costs.

ADE Corporation – Manila, Philippines **2001 to 2007**
Electrical Engineer

Designed and estimated project costs, performed take-offs and developed project proposals.
Supervised, checked and approved all estimates and designs of projects.
Managed daily project completions.
Formulated guidelines for new projects.
Involved in the manufacturing and installation of ADE Electrical outdoor lighting using conventional or solar power.

Prior Professional Experience:

Project Engineer, Asia Dynamic Elektrix Corporation - Manila, Philippines
Project Engineer, CIPER Engineering Corporation - Manila, Philippines

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EDUCATION:

B.S. Electrical Engineering, Western Institute of Technology
Design, Estimate and Motor Control, Los Angeles Trade Technical College
Intensive English Language Program, Moraine Valley Community College

Training:

Total Program for Construction Supervisors
Arc Flash
Zero Harm
Process Safety Management
VFD Programming with PowerFlex 750 series and Parker Compax3 servo drive
Rockwell Software RX Logic, Studio 5000
HMI - Ignition
Fanuc Robotic Cell
SAP

Professional Membership:

Institute of Integrated Electrical Engineers of the Philippines

Associations:

Philippine-American Association – Central Savannah River Area
Knights of Columbus - Philippines

Languages:

English and Tagalog
