

Credentials

Professional Engineer

Pennsylvania License # PE-029795-E

Education

Graduate Work in Power Systems Analysis

Drexel University

Bachelor of Science in Electrical Engineering

Pennsylvania State University, 1975

Continuing education programs offered by General Electric, Westinghouse, McGraw Edison, Bucyrus Erie and others on:

- Harmonic Analysis & Power Factor
- System Overcurrent Protection
- System Overvoltage Protection
- Power System Harmonics
- Industrial & Commercial Power Distribution
- Applied Protective Relaying
- Industrial Power Systems Coordination
- Diesel Electric Equipment Maintenance
- Electric Power Shovel and Dragline Maintenance
- Mechanoanalysis Vibration Fundamentals
- Public Utility Operation and Management
- Power System Relaying



Professional Service Positions

Craft Advisory Committee, Berks County Vocational - Technical School

Professional Associations

Institute of Electrical and Electronic Engineers (IEEE)

Teaching Experience

Pennsylvania State University, Instructor
Large motor maintenance and Diagnostic Center, Instructor
Electric Power Research Institute (EPRI), Instructor

Areas of Concentration

Electrical engineering
Industrial plant engineering
Design analysis
Nfpa codes & standards
Electric power transmission
Electrical systems
Electrical wiring
Industrial machines
Insulation

Electric company standard practice
Maintenance procedures
Electrical safety
Electric usage
Electrical construction
Electrical devices/equipment
Grounding
High voltage
Mining equipment

Specific Experience & Interest

Electrocution, Shock & Burns
Alternators
Amusement Parks
Brownouts
Cement Plants
Circuit Breakers
Cogeneration Plants
Electric Motors
Electric Poles
Electric Power Distribution Systems
Electric Power Plant Construction
Electrical Lockouts
Electrical Protective Devices
Emergency Generators
Dairy Farms
Substations
Capacitors

PCB's Emergency Power
Equipment Maintenance
Electric Excavators
Electric Power Shovels
Electric Draglines
Electric Blast Hole Drills
Generators
Oil & Gas Pipelines
Petrochemicals Plants
Power Lines
Switchgear
Transformers
Transmission Lines
Underground Power Lines
Utility Poles
Pumping Stations

Professional Experience

Institute for Products, Engineering & Construction **1999 to Present**

Consulting and forensic engineering services for attorneys and insurance companies. Analysis of defects in electrical systems, components and products. Consultation in fields of power generation and transmission, utility company practices, construction and product safety; construction means, methods and relationships, electrical accidents and electrocution.

Power System Associates, Inc. - Principal **1990 to Present**

Overall responsibility for Consulting Engineering Firm specializing in medium voltage engineering analysis, electrical testing and evaluation, forensic engineering, training and technical manpower requirements. Practice provides service to investor and municipal utilities, oil companies, coal mining operations and computer manufacturing.

Atlantic Pipeline Corporation - Corporate Electrical Engineer **1986 to 1989**

Develop corporate electrical engineering, construction, and maintenance functions for a new company. Direct consultants and constructors in large pumping station electrical projects. Evaluation of variable frequency drives, electrical facilities upgrade, specifications for equipment and installation.

Metropolitan Edison Company **1984 to 1986**

Supervisor of Engineering Technical Group. Distribution system project evaluation including line conversions, equipment selection, and protection. Technical support for construction, maintenance, relay, and industrial customers. Supervise, staff, and train engineering technical group. Specialized studies in power system operation and maintenance.

Bethlehem Steel Corporation **1975 to 1984**

Held various positions in the Electrical and Engineering Departments including Project, Maintenance, and Electrical Supervisor. Application, design, and maintenance of substations, electrical distribution and plant electrical facilities, 69KV and below. Power system layout for electric power shovels and compliance with federal and state mine regulations. Electrical department staffing, training, and project control. Total project responsibility from initial planning to design and installation.

Presentations and Seminars Conducted

LeBarr Electric 1989 & 1993
Developed and conducted a ten hour training program on medium voltage safety, medium voltage cable terminations and applications with hands on work for electricians in various industries. Developed ten modules of eight hour electric power and safety training programs for plant construction and electrical engineers.

Bethlehem Mines Corporation 1988 through 1991
Developed and conducted Department of Labor mandated yearly electrical safety training program for mine electricians and lineman.

Pennsylvania State University 1988 & 1989
Prepared and conducted 45 hour training program on industrial electricity and industrial electrical maintenance for area industry. Participants included plant and facility engineers, industrial electricians and designers.

Regional Lineman Training Course 1988 & 1989
Prepared and conducted eight hour courses on hot line maintenance, construction standards, bucket truck safety, underground primary safety, fusing practices and safety and secondary design consideration. Course was presented for linemen from various municipal utilities.

PCB Problems and Practices 1990
Developed and taught 6 hour course related to PCB's for Wellsboro Electric.

Pennsylvania Power and Light Company 1988 & 1989
Provided three hours of instruction on solidly grounded, ungrounded and resistance grounding at a P.P.& L. course on power distribution.

Ferroresonance on a 34.5KV System 1986
Conducted seminar for Metropolitan Edison personnel dealing with the sources and solutions for ferroresonance.

High Resistance Grounding for Pipeline Motors 1988
Presented at Institute of Electrical and Electronic Engineers Summer Power Conference.

Electric Power System Harmonic Workshop 1994
Develop and conduct a program for major industrial customers in Lehigh Valley.

Supervisory Electrical Technician Safety Seminar 1995
Develop an electrical safety training program for technical supervisors in support of Sun Pipe Line Company safety program.