

EDUCATION

1986 **Bachelor of Science, Electrical Engineering**
University of Missouri-Rolla

EXPERIENCE

June 2002 **Engineering Design & Testing Corp.**
to Present **Overland Park, Kansas**

Consulting Engineer

Specialized consulting in the area of electrical engineering for commercial, industrial and residential systems, including: system failures, damage assessment/evaluation, code and standards compliance, trouble-shooting of electrical equipment and control systems, resolution of electrical construction disputes, construction schedule analysis, change-order and construction site management. Provide investigations to determine the origin and root cause of fires and explosions. Preparation of repair/replace cost estimates.

Specific areas of experience include: transformers and substations, switchgear, generators, switchboards, load/distribution panels, panelboards, electrical bus, fire suppression systems, MCCs.

November 1999 **Electrical Contractors of KC, Inc.**
to June 2002 **Raytown, Missouri**

Project Manager

Project management of all stages of electrical construction for industrial and commercial projects including: estimating, submittal preparation, project buy-out, scheduling, field supervision, cost control/analysis and billing. Engineering duties included: conceptual meetings with clients, design coordination, monitoring construction for compliance with specifications and local/national codes, developing construction drawings from contract documents and preparing as-built drawings. Projects included an addition to a plastic extrusion plant, a 140,000 s.f. warehouse, tenant finishes, a data security emergency power system, a car dealership addition/remodel and sport complexes. Design-build projects included a car dealership, a warehouse, a plastic extrusion plant and a sport complex.

August 1993 **Huxtable & Associates**
to November 1999 **Lawrence, Kansas**

Project Manager

Project management and estimating of industrial, commercial and institutional electrical construction. Management of these projects included development of submittal drawings, purchasing, critical path method software generated scheduling, coordinating subcontractors, engineering construction drawings, field supervision, "Operation and Maintenance" manual development, production of as-built drawings and billing. Projects included a wastewater treatment plant, a foil stamping facility, a pet food canning line, control consolidation at a food grade phosphorus plant, hospital additions and a state university technology center. The foil stamping facility involved the

development of Standards of Operations and a coordinated plant-wide start-up. The wastewater treatment plant project involved a redesign for constructability and cost savings of approximately two miles of duct bank containing three voltage levels and associated manholes.

May 1986
to August 1993

**Guarantee Electrical Co.
St. Louis, Missouri**

Project Manager

Project management and estimating of industrial, commercial and institutional electrical construction. Engineering duties on industrial projects included conversion of PID and schematic drawings into point to point wiring and construction drawings. Projects included wastewater pumping stations, elementary schools, blast furnace relines, a steel mill furnace precipitator, a brewery utility modernization, a car dealership and a federal prison. The brewery modernization involved the development of electrical construction drawings from PID drawings and ladder logic diagrams.

EXPERIENCE

Representative Investigations (partial list)

Description Multi-Family Residential Fire — City, State

Consultation regarding root cause and origin of apartment building fire. Conduct onsite examination; provide engineering opinion regarding root cause and origin of fire.

Industrial Fire — City, State

Consultation regarding root cause and origin of fire in a wood pallet manufacturing facility. Conduct onsite examination, construct exemplar main distribution panel for testing, conduct and videotape exemplar event; review depositions and reports by other; provide engineering opinion regarding root cause and origin of fire.

Damage to Electrical System — City, State

Consultation regarding cause and scope of damage to electrical system in a plastics manufacturing facility. Conduct onsite examinations; conduct testing of damaged equipment and electrical system; review reports and depositions by others; provide engineering opinion regarding cause and scope of damage.

Vehicle Fire — City, State

Consultation regarding root cause and origin of vehicle fire. Conduct examination of vehicle; review service tickets and Vehicle Inquire System Summary; examination of exemplar parts; review depositions and reports by others; provide engineering opinion regarding root cause and origin of fire.

Scope of Damage to Processing Facility — City, State

Consultation regarding scope of damage and repair/replace analysis for taconite processing plant. Conduct onsite examinations of equipment and building – including transformers, switchgear, motor control room and associated wiring/components; review technical drawings; determine scope of damage and estimate cost of repair and/or replace; review final costs, review reports and depositions by others; provide engineering opinion regarding scope and cost of damage.

Root Cause of Transformer Gassing — *City, State*

Consultation regarding transformer gassing in a power generation facility. Conduct external and internal examinations of the transformer; review transformer testing results and repair proposals; review reports by others; review codes and standards; review depositions, provide questions and consultation for depositions of other parties; attend depositions of other parties; provide engineering opinion regarding cause and scope of damage.

Root Cause and Scope of Damage to Gas Turbine Generator — *City, State*

Consultation regarding a 193,000-KVA gas turbine generator at a power plant in Mexico. Generator stator core damage indicated ground-fault arcing activity involving a neutral bar winding. Review available information; examine generator after its removal from service; witness and review root cause analysis; participate in Kepner Tregoe process; determine scope of damage and root cause; review final repair costs.

REGISTRATIONS and CERTIFICATIONS

Registered Professional Engineer in Alabama (31363-E)
Registered Professional Engineer in Arizona (50041)
Registered Professional Engineer in Arkansas (13301)
Registered Professional Engineer in Colorado (46272)
Registered Professional Engineer in Connecticut (PEN.0030635)
Registered Professional Engineer in Georgia (PE039712)
Registered Professional Engineer in Hawaii (16130)
Registered Professional Engineer in Illinois (62.060764)
Registered Professional Engineer in Indiana (PE10911241)
Registered Professional Engineer in Iowa (16461)
Registered Professional Engineer in Kansas (17139)
Registered Professional Engineer in Kentucky (26819)
Registered Professional Engineer in Louisiana (36139)
Registered Professional Engineer in Massachusetts (51434)
Registered Professional Engineer in Michigan (6201056611)
Registered Professional Engineer in Minnesota (49433)
Registered Professional Engineer in Mississippi (29411)
Registered Professional Engineer in Missouri (024494)
Registered Professional Engineer in Nebraska (10626)
Registered Professional Engineer in Nevada (02392)
Registered Professional Engineer in New Mexico (24435)
Registered Professional Engineer in North Dakota (PE-6649)
Registered Professional Engineer in Ohio (75483)
Registered Professional Engineer in Oklahoma (23256)
Registered Professional Engineer in Pennsylvania (PE077280)
Registered Professional Engineer in South Dakota (9667)

Registered Professional Engineer in Tennessee (114083)
Registered Professional Engineer in Texas (101721)
Registered Professional Engineer in Virginia (0402048099)
Registered Professional Engineer in West Virginia (20314)
Registered Professional Engineer in Wisconsin (41373-006)
Registered Professional Engineer in Wyoming (14955)

PROFESSIONAL ORGANIZATIONS

Institute of Electrical and Electronic Engineers (IEEE)
International Association of Arson Investigators (IAAI KC Chapter)
National Association of Fire Investigators (NAFI)
National Council of Examiners for Engineering and Surveying (NCEES)
National Fire Protection Association (NFPA)

CONTINUING EDUCATION

2016 International Symposium on Fire Investigation Science and Technology

2015 2014 NFPA 70 – National Electric Code Update
Electric Power Substations & Distributions
Electrical Protection Grounding
Electrical Tools: Digital Multimeters II-Applications
Louisiana Professionalism and Ethics

2014 International Symposium on Fire Investigation Science and Technology

2012 Doble “Life of the Transformer” Seminar
International Symposium on Fire Investigation Science and Technology

2010 Doble “Life of the Transformer” Seminar & Lab

2009 Doble “Revolutionary Machines” Seminar

2008 International Symposium on Fire Investigation Science and Technology

2006 International Symposium on Fire Investigation Science and Technology

IAAI Georgia Chapter Fire Investigators Seminar

IAAI Kansas City Arson Task Force Fire Investigators Seminar

Investigation of Gas and Electric Appliance Fires

National Fire, Arson, & Explosion Investigation Training Program