

Kenneth L. Gentile | Forensic Electrical/Fire Protection Engineer, P.E.

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Professional Summary:

Mr. Gentile's expertise in electrical and fire protection engineering has been acquired from performance of design, consulting, project management of building systems construction, and forensic engineering.

More specifically these skills include:

- Forensic experience in the preparation of site investigation, written engineering opinions and expert witness consulting. Investigations include:
 - Extent of damage to electrical apparatus
 - Causes of electrical failure.
 - Electrical activity resulting in sources of ignition.
 - Fire, flood, and lightning damage to electrical equipment and systems.
 - Power surge damage to electrical systems.
 - Construction methods and design errors and omissions.

Electrical apparatus, equipment, systems, complimentary system subjects of investigation include, but are not limited to residential/commercial electrical distribution; medium and high voltage utility distribution; fire suppression and signaling systems; emergency and stand-by power systems; solar PV panels and off-grid components, audio/visual and communication systems; et.al.

- Design of operational and compliance solutions for electrical, fire protection, and complementary systems. Occupancies types include healthcare, aviation, petrochemical, high-rise structures, laboratories, transportation, medium and high voltage transmission/distribution, assembly and data centers. He is also experienced with application of design standards in classified (hazardous) areas of industrial and energy industry facilities. Analysis of the compliance of electrical construction with applicable codes and standards.
- Project management responsibilities for directing engineering teams designing controls electrical systems and instrumentation. He has also supervised design and production teams for industrial, onshore, offshore, and subsea controls, industrial electrical power units, and SCADA systems.

Licenses and Certifications:

Professional Electrical/Fire Protection Engineer, TX, 75952

Professional Electrical/Fire Protection Engineer, NM, 16348

Professional Electrical Engineer, LA, 30015

Professional Electrical Engineer, AR, 17685

Professional Electrical Engineer, KS, 25641

Professional Electrical Engineer, TN, 120600

Professional Electrical Engineer, MS, 28299

Professional Electrical Engineer, AL, 36669

Large Loss Experience:

Houston, Texas.

Interior Substation Reconstruction.

Inspected site and reconstruction cost estimates on damaged 3-phase 15KV / 480V package substation transformers at unoccupied mercantile facility.

Southeast, Louisiana.

Hurricane Damaged Chemical Facility.

Inspected site and provided medium voltage equipment replacement cost information for multi-site chemical facility damaged by Hurricane Ida.

Central Louisiana.

Natural Gas Facility Explosion.

Inspected site and provided reconstruction cost information to natural gas facility damaged by on-site explosion.

Western New Mexico.

Natural Gas Facility Explosion.

Inspected site and provided reconstruction cost information to natural gas facility damaged by on-site explosion.

North Central Texas.

Church Fire.

Inspected site and provided restoration cost information to church audio-visual equipment exposed on-site fire and fire-fighting efforts.

Design and Construction Project Experience:

Houston, TX.

Project Management for Post-Flood Refurbishment of Wortham Theater Electrical, Fire Suppression, and Life Safety Infra-structure.

Directed on-site design teams and installing contractors on demolition, design, and construction at the large assembly performance venues. Replaced systems include redesign of 5KV electrical distribution feeders from 34.5KV/5KV utility connections; 460/277 volt motor and lighting distribution and fixtures; 208/120 volt motor and general use devices; fire alarm; fire pumps, tanks and automatic sprinklers; stage and house dimming systems; and interconnected equipment. Additional duties included assessing extent of flood damage; developing compliance approaches to meet current codes; specifying replacement technologies to outdated and unavailable equipment; and cost control.

Oklahoma City, OK.**Engineer of Record for New Stand-by Generator System and Emergency Lighting.**

Provided a design to install a new stand-by generator and emergency lighting system in existing high-rise hotel. Task included schedule to install generator and electrical distribution modifications while hotel remained occupied and under direct observation of State Fire Marshal's Office.

New Braunfels, TX.**Design Engineer of Record for Sensor and Water Spray for Coal Conveyor Expansion.**

Designed new sensor and water spray fire suppression system to prevent combustion of coal dust on coal conveyor at cement production plant. Task involved locating and evaluating available water supply and designing adequate pumps, piping and nozzle placement. Electronic controls and sensors design included integration of new controls to existing fire/life safety and production control centers.

Albuquerque, NM.**Design Engineer of Record for Roof-top Helipad Suppression System.**

Designed and performed construction oversight for foam cannon system with automatic suppression release for hospital helipad on sixth-story roof. Task include design of foam storage, pumps, piping and automatic sweep dispersal cannons. Control design had to integrate with hospital life safety systems. Compliance with applicable codes was coordinated with State Fire Marshal's representative.

Albuquerque, New Mexico**Interim Fire-Life Occupancy Plan During Arena Renovation and Addition.**

Provided an occupancy plan to Contractor for arena renovation and addition to permit use of the facility during construction. Plan details included fire department access, temporary sprinklers and alarm, and temporary rated public egress. Plan was coordinated with representatives of the State Fire Marshal's Office.

Court Qualifications/ Depositions:

Litigation CV available upon request.

Professional Experience:

EFI Global, Senior Engineer, 2019 – Present
Arup-Texas, Senior Engineer, 2017 – 2019
Donan Engineering, Senior Forensic Engineer, 2017
Proserv, Inc., 2014 – 2017
JensenHughes, 2000 – 2014
The L.E. Myers Company 1979-1981

Specialized Education:

January 2017 to Present:

Post-Loss Equipment Evaluations, 12.0 Hours, 2024
Arc Flash Standards OSHE 29 and NFPA 70E, 8.0 Hours, 2021
Guide to Achieving Operational Efficiency, 9.0 Hours, 2017
Capacitance, 4.0 Hours, 2017
Controlling Electrical Hazards, 4.0 Hours, 2017
Solar Energy, 4.0 Hours, 2017

Energy Management For Motor Driven Systems, 8.0 Hours, 2017

Education:

B.S. Electrical Engineering, Washington University, St. Louis, MO, 1979

Affiliations:

Past Positions on National Fire Protection Association (NFPA) Technical Committees:
Commissioning Fire Protection Systems (NFPA 3)
Protected Premises Fire Alarm System (NFPA 72)
Fire Alarm Initiating Devices (NFPA 72)

Past Memberships

Society of Petroleum Engineers (SPE), Member.
Society of Fire Protection Engineers (SFPE), Professional Member.

Courses Instructed/ Guest Lecturer:

"Laboratory Life Safety Requirements", August 25, 2011

"Ethanol Blended Fuels for Loading Terminals", June 3, 2007.

"Survivable Fire Alarm Circuits", March 6, 2007.

"Update for Video Image Smoke Detection", May 10, 2007.

Publications and Presentations:

Gentile, Kenneth Co-author. "The Hidden Dangers of Smart Utility Meters" Commentary Paper, EFI Global, August, 2023.

Gentile, Kenneth. "Life After Halon" Article, Consulting Specifying Engineer Magazine, November, 2005.

Gentile, Kenneth. "The Next Wave In Fire? Video Smoke and Flame Detection," Security Systems News, April 6, 2005.

Gentile, Kenneth. "VoIP Attracts Customers and Controversy," Security InfoWatch.com, October 27, 2008.