

Wayne C. Potempa, PE, CFEI
Senior Electrical Engineer

SUMMARY

Mr. Potempa is a Senior Electrical Engineer, Licensed Professional Engineer and Certified Fire and Explosion Investigator who has over twenty years experience with product design, test and failure analysis involving high voltage and industrial control products and systems. He specializes in electrical product failure investigations and expert witness testimony for law firms, insurance companies and industry. He conducts residential, commercial and industrial fire and explosion origin and cause investigations and product failure analysis. He is experienced investigating electrocution and electric shock accidents, as well as stray voltage occurrences.

He has conducted numerous product failure investigations resulting from causes such as component vendor changes, changes in manufacturing methods, changes in quality assurance methods and procedures, product packaging, improper installation, field misapplication and environmental impact. In addition, he has experience with product development which includes developing new product specifications through market implementation. He has extensive experience with product liability litigation and has had legal involvement on patent, copyright and trademark issues.

Mr. Potempa has directed high voltage power testing and resolved test circuit issues for high voltage SF6 load switches. He has conducted computer simulated studies of laboratory circuits for testing switchgear and high voltage fuses and has been the principal contact for UL, CSA, and NEMA organizations. In addition, he lead the development of technologically advanced wireless communications products for residential and commercial security systems. Mr. Potempa is experienced in evaluating new business and new product opportunities and developing technical specifications.

EDUCATION AND REGISTRATION

Master of Science in Business Administration, Northwestern University, 1983
Master of Science in Electrical Engineering, Illinois Institute of Technology, 1978
Bachelor of Science in Electrical Engineering, University of Detroit, 1972
Registered Professional Engineer, State of Oregon, No. 63032PE
Certified Fire and Explosion Investigator, NAFI, No. 6781-2413, 1999

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronic Engineers (IEEE)
National Fire Protection Association (NFPA)
International Association of Arson Investigators (IAAI)
Society of Fire Protection Engineers, Cascade Chapter (SFPE)

PROFESSIONAL DEVELOPMENT

- National Electrical Code Seminar, 1999
- Investigation of Gas and Electric Appliance Fires, Fire Findings Laboratories, 2000
- OSHA 3075-Controlling Electrical Hazards, 2004
- Electrical Transmission and Distribution Safety, 2004
- An Overview of Incident Investigation and Reporting, 2004
- Design to the Fire Alarm Code, NFPA 72-2002, 2004
- Diesel Engine Fundamentals, 2005
- Electrical Design-Cathodic Protection, 2005
- Sizing Supply Conductors for Two-Speed Single Winding Induction Motors, 2006
- Small Motor Control (1/4 HP – 200 HP), 2006
- Power Systems – Basic Concepts and Applications – Part 1, 2006
- Conduit System Design, 2006
- HVAC: Cool Thermal Storage, 2006
- Introductory Lightning Protection Design per NFPA 780, 2006
- Characteristics and Selection Parameters of Fans and Blower Systems, 2006
- Introduction to Batteries, 2008
- Basic Fire Investigation, 30th Annual Fire and Arson Seminar, Oregon Chapter 31, IAAI, 2008
- Circuit Protection, 2009

SEMINARS PRESENTED

- Forensic Investigations, An Engineer's Perspective, Oregon Paralegal Association, 2005
- Insights to Product Development and Product Liability, International Association of Arson Investigators Chapter 31, 2003
- Fire & Product Liability / Electrical Perspective, Oregon Casualty Adjusters Association, 2002
- Forensic Investigations, State Farm Insurance Companies, Dupont, Washington, 2000
- Electrical Fire Investigation, Two-day seminar, Aberdeen Fire Department, Aberdeen, Washington, 1999

PROFESSIONAL EXPERIENCE

- Failure analysis of low and high voltage electrical components and systems
- Extensive experience with product liability litigation
- Developed UL listed products including transfer switches, bypass isolation transfer switches, closed transition transfer switches, delayed transition transfer switches and contractors
- Leadership position in successful ISO 9001 certification
- Collaborated with Group Schneider on the first CE/UL rated transfer switch
- Involvement in establishing minimum "safe area" for high voltage fuses
- Legal involvement on patent, copyright and trademark issues
- Leader of quality improvement program

DETAILED WORK HISTORY

West Coast Forensics, Engineering & Design, LLC, 2006

Currently fulfilling primarily the same forensic engineering roll and duties as performed during my tenure at CASE Forensics/Schaefer Engineering. As one of the principals of West Coast Forensics, duties also include the execution of business operations.

CASE Forensics formerly Schaefer Engineering Corporation, 1998 – 2005

Forensic Engineer specializing in electrical fire origin and cause investigations, electrocution and electric shock, the effects of stray voltage, electrical system failures including electrical and electronic product analysis, testing and engineering consulting on electrical system design and analysis.

Sentrol, Inc., 1997 – 1998

Engineering Consultant

Development of business case justification and technical specifications for new backup wireless communication method.

Zenith Controls Incorporated, 1978 – 1997

Vice President of Engineering, 1985 – 1997

Manager of Product Development, 1983 – 1985

Project Engineer, 1978 – 1983

Provided leadership, project management and technical supervision to 40 professionals and technical support personnel in product development, application engineering, engineering database, quality assurance and manufacturing engineering. Developed UL listed products and coordinated communications with UL, CSA and NEMA organizations. Responsible for all company patent, copyright, trademark and product liability issues.

G & W Electric Company, 1975 – 1978

Project Engineer responsible for high voltage power testing and resolution of product design and test problems. Collaborated with Consolidated Edison on cable termination project.

S & C Electric Company, 1972 – 1975

Project Engineer responsible for simulating computer studies of laboratory circuits for testing SF6 switchgear and high voltage fuses. Analyzed failed returned equipment to determine failure mode and recommended engineering and manufacturing modifications.