

**Professional Resume
of
JOHN P. REAGAN, P.E.**

February 2025

I. General Information

Electrical Engineer
Schaefer Engineering, Inc.
Wentzville, Missouri

II. Professional Summary

A. Education: Bachelor of Science Degree
Electrical Engineering
Southern Illinois University
Edwardsville, Illinois
May 1996-Magna Cum Laude

Associates of Arts Degree
Engineering Science
St. Louis Community College
St. Louis, Missouri
December 1992

B. Experience:

June 2003 to present

Position: Project Engineer - Electrical
Schaefer Engineering, Inc.
Wentzville, Missouri

April 1999 through May 2003

Position: Project Engineer - Electrical
FTI/S.E.A. Consulting, SEA Limited
St. Louis, Missouri

Responsible for electrical engineering projects including failure analysis of electrical components and systems, analysis of electrical equipment and appliances to determine their role in an incident, and evaluation of electrical shock and electrocution incidents. Fire origin and cause analysis. Other types of projects include alarm system and equipment evaluations, equipment damage evaluations such as lightning or water damage, and lighting system evaluations.

Experience (continued):

May 1981 through March 1999

Positions: Deputy Director of Electrical Engineering/Project Manager
Sverdrup & Parcel, Sverdrup Corporation, Sverdrup Facilities, Inc.
and Jacobs Engineering, Inc.
St. Louis, Missouri

Responsible for the successful delivery of quality projects on schedule and within budget. Specific duties included troubleshooting, failure analysis, project planning, production management, scheduling, and electrical engineering of building and site electrical systems including power distribution, lighting systems, and communication systems. Project Manager including oversight of multi-discipline design and construction activities. Master Builder Award recipient.

III. Professional Registration

Registered Professional Engineer in the States of Missouri (2001), Illinois, Indiana, Arkansas, Alabama, Kansas, Michigan, Kentucky, Oklahoma and Tennessee.

Certified Fire and Explosion Investigator (NAFI-CFED), National Association of Fire Investigators Certification Board. (2010, Recertified 2015, 2020, 2025)

Certified Fire Investigator (IAAI-CFI), International Association of Arson Investigators. (2014, Recertified 2019, 2024)

Certified Fire Investigator, Missouri Division of Fire Safety. Certified to the standards and qualifications in NFPA 1033-2009. (2015, Recertified 2018, 2021, 2024)

IV. Continuing Education

1993 - Overcurrent Protection, Bussmann
1994 - Overcurrent Protection, Square D
1996 - Telecommunications Infrastructure Planning, Washington State University
1996 - Fundamentals of Project Management, Caltech
1999 - Annual Conference/Fire Investigation Training, Missouri Chapter IAAI
1999 - Live Burns, Testing and Analysis, S.E.A. Columbus, Ohio
1999 - Ohio Arson School
1999 - Investigation of Electrical Appliance Related Fires, IAAI/AHAM
2000 - Annual Conference/Fire Investigation Training, Missouri Chapter IAAI
2001 - Annual Conference/Fire Investigation Training, Illinois Chapter IAAI
2001 - Investigation of Gas and Electric Appliance Fires, Fire Findings, Inc.
2002 - Annual Conference/Fire Investigation Training, Illinois Chapter IAAI
2002 - Annual IAAI Conference, International
2004 - Annual IAAI Conference, Missouri Chapter IAAI (Partial)
2004 - Annual IAAI Conference, Illinois Chapter IAAI (Partial)
2005 - Seminar on NFPA 70-2005, National Electrical Code
2005 - Seminar on NFPA 70E, Standard for Electrical Safety in the Workplace
2005 - OSHA Asbestos Awareness, AmeriSafe, Aurora, Illinois

Continuing Education (continued):

2007 - Seminar NFPA 72-2007, National Fire Alarm Code
2007 - Seminar Fire Alarm Inspection, Testing and Maintenance
2007 - Seminar, Forensic Fire Scene Reconstruction, IAAI
2009 - Mazzone/Buxton Training Conference, Illinois Chapter IAAI
2009 - Annual Conference/Fire Investigation Training, Illinois Chapter IAAI
2010 - National Fire, Arson & Explosion Investigation Training Program, NAFI
2010 - IAAI CFI Trainer, Electrical Safety
2011 - Mazzone/Buxton Training Conference, Illinois Chapter IAAI
2012 - Mazzone/Buxton Training Conference, Illinois Chapter IAAI
2012 - Designing for Compliance with ANSI/AAMI IEC 60601-1, Underwriters Laboratories
2013 - OSHA Asbestos in Construction, Click Safe
2013 - Asbestos Operations and Maintenance, Environmental Safety
2014 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2015 - National Fire, Arson & Explosion Investigation Training Program, NAFI
2015 - Hazardous Voltage/Current in Marinas, NFPA/American Boat and Yacht Council
2015 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2016 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2017 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2017 - IAAI CFI Trainer, Thermometry, Heat and Heat Transfer
2017 - IAAI CFI Trainer, Arc Mapping Basics
2018 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2018 - NASP/IAAI, Understanding Safety Concerns: Asbestos at the Fire Scene
2018 - NFPA, Developing a Comprehensive Electrical Safety Program
2018 - IAAI CFI Trainer, Critical Thinking Solves Cases
2018 - IAAI CFI Trainer, Residential Electrical Systems
2018 - IAAI CFI Trainer, The Impact of Ventilation in Building Structures on Fire Development
2018 - IAAI CFI Trainer, Understanding Undetermined
2019 - IAAI CFI Trainer, Fundamentals of Interviewing
2019 - IAAI CFI Trainer, Fire Investigator Scene Safety
2019 - IAAI CFI Trainer, Discovery in Criminal Cases
2019 - IAAI CFI Trainer, Basic Electricity
2019 - Asbestos Operations and Maintenance, Environmental Safety Refresher
2019 - Buxton/Mazzone Training Conference, Illinois Chapter IAAI
2019 - NFPA, Five Things You Need to Know About NFPA 70E Training Requirements
2020 - Asbestos Operations and Maintenance, Refresher
2020 - IAAI CFI Trainer, Emerging Technologies in Fire Investigation
2020 - Red Vector, 2020 National Electrical Code Changes, Focus on Wiring Methods
2020 - Red Vector, 2020 National Electrical Code Changes, Branch Circuit GFCI Protection
2020 - Red Vector, Electrical Protection Grounding
2020 - IAAI CFI Trainer, Digital Photography for the Fire Investigator
2021 - Asbestos Operations and Maintenance, Refresher
2021 - Anti-Harassment Training (IL-PE Requirement)
2021 - Buxton/Mazzone Training Conference, Illinois Chapter IAAI
2021 - IAAI CFI Trainer, Lithium-ion Battery Fires
2021 - DRI, Advanced Failure Analysis of Lithium-ion Batteries

Continuing Education (continued):

2021 - ASM, 3D Imaging of Lithium-ion Batteries
2022 - IAAI CFI Trainer, Effective Investigation and Testimony
2022 - Asbestos Operations and Maintenance Refresher
2022 - Ethics; Laws and Rules for Engineers
2022 - Buxton/Mazzone Training Conference, Illinois Chapter IAAI
2022 - IAAI CFI Trainer, The Scientific Method for Fire and Explosion Investigations
2023 - Asbestos Operations and Maintenance, The Asbestos Institute
2023 - IAAI CFI Trainer, PPE for Post-Fire Scenes
2023 - IAAI CFI Trainer, Fire Effects Parts 1 and 2
2024 - Electrical Wiring for Hazardous Areas, Titan Continuing Education
2024 - DC Electrical Circuits and Devices, Titan Continuing Education
2024 - Understanding Electricity and Electrical Components, Titan Continuing Education
2024 - Common Sense Ethics; PDH Now
2024 - Laws and Rules for Engineers; PDH Now

V. Professional Affiliations

International Association of Arson Investigators (IAAI)
 Missouri Chapter, IAAI
 Illinois Chapter, IAAI
National Association of Fire Investigators (NAFI)
Institute of Electrical and Electronics Engineers (IEEE)
 Senior Member
National Fire Protection Association (NFPA)
 NFPA, Electrical Section
 Technical Committee on Electrical Arcing (921-2014 Edition)
 Task Group on Marine Fire Investigation (921, Chapter 30-2020 Edition)

VI. Courses Taught

Electric Appliance Fires - April 2000, Annual Conference of the Missouri Chapter IAAI.

Engineering Role in Fire Investigation - April 2001, Annual Conference of the Illinois Chapter IAAI, Southern Zone.

Electrical Appliance Fires – April 2002, Grinnell Mutual Insurance Company

Engineering Role in Fire Investigation – May 2002, IAAI Annual Conference.

Electrical Services at the Fire Scene – March 2003, Annual Conference of the Illinois Chapter IAAI, Southern Zone.

A Team Approach to Fire Investigation – September 2003, Annual Conference of the Illinois Chapter IAAI.

Courses Taught (continued):

Fire Scene Electrical Systems – May 2004, Annual Conference of the Missouri Chapter IAAI.

A Discussion of Electrical Engineering Topics – May 2004, Annual Conference of the Illinois Chapter IAAI, Southern Zone.

Electrical Systems at the Fire Scene – September 2005, 38th Annual Fire & Fraud Investigation Conference of the Professional Fire & Fraud Investigators Association.

Investigating Electrical Fires including the Evaluation of Alarm Systems – September 2006, Fire Investigation Training Conference of the Illinois Chapter IAAI, in Cooperation with the Illinois Fire Service Institute and the Office of the State Fire Marshall.

Investigating Electrical Fires – September 2006, 24th Annual Fire Investigation Seminar of the Iowa Chapter IAAI.

Electrical Fire Investigations – October 2008, Chicago Fire Department, Office of Fire Investigations, In-Service Training.

An Update on Electrical Investigation Topics – March 2012, annual conference of the Central Illinois Fire Investigators Association/ Illinois Chapter IAAI.

Proving the Cause, Beyond the Basics – March 2015, annual conference of the Central Illinois Fire Investigators Association/ Illinois Chapter IAAI.

Fire Investigation 101 – November 2016, DRI Fire Science Conference, Scottsdale, AZ.

NFPA: It's Not Just 921 – September 2018, DRI Fire Science Conference, Washington, D.C.