

## TONY CATALFOMO, M.S.E.E., P.E.

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## **EDUCATION**

2007	Master of Science in Electrical Engineering
	Worcester Polytechnic Institute, Worcester, Massachusetts
	(Research in Power Quality and Power Electronic Simulation)

1987 **Bachelor of Science in Electrical Engineering** University of Hartford, West Hartford, Connecticut

## EXPERIENCE

January 2015Engineering Design and Testing Corp./EDT Engineers, P.C.to PresentCharlotte, North Carolina

District Engineering Manager (May 2020 – Present) Consulting Engineer

Consulting in the area of electrical engineering for residential commercial, and industrial systems, including cause and origin analysis of electrical system failures, electrical code compliance review, technical investigation of incidents involving industrial electrical power distribution systems and industrial control systems, project management, scope of damage, and analysis of costs to repair or replace electrical equipment and systems. Provide consultation services in loss prevention and risk assessment.

February 2006Teknor Apex Co.to January 2015Fountain Inn, South Carolina

### Plant Manager

Managed all aspects of the manufacturing of custom PVC compounds, conductive vinyl compounds and consumer products operations, including all site regulatory issues. Specific responsibilities included production, training, inventory control, scheduling, maintenance, shipping, customer service, engineering and regulatory compliance required for the operation of the facility. Developed and implemented NFPA 70E Arc Flash training program and Hazard Study Analysis for Teknor Apex North American operations. Project Manager for the Operational Excellence initiative to install state of the art plastics compounding process.

January 2005Teknor Apex Companyto January 2006Pawtucket, Rhode Island

### Director of Engineering/Electrical Group Leader

Directed engineering and design staff in support of all facilities worldwide. Organized electrical/controls group to support and develop guidelines for electrical installations throughout Teknor Apex. Project Manager for all capital projects throughout organization.

# April 1999Teknor Apex Companyto December 2005Attleboro, Massachusetts

### Plant Manager

Site manager for the Hebronville, MA facility of Teknor Apex. The site operated two business centers: Color Concentrates and Chemicals (Plasticizers) Divisions. Managed all aspects of the manufacturing operation including all site regulatory issues. Specific responsibilities included production, training, inventory control, scheduling, maintenance, shipping, customer service, and regulatory compliance required for the operation of the facility.

# May 1998Engineering Design and Testing Corp.to April 1999Columbia, South Carolina

#### **Consulting Engineer**

Consulting in the area of electrical engineering for residential commercial, and industrial systems, including cause and origin analysis of electrical system failures, electrical code compliance review, technical investigation of incidents involving industrial electrical power distribution systems and industrial control systems, project management, and analysis of costs to repair or replace electrical equipment and systems.

## March 1993Teknor Apex Companyto April 1999Fountain Inn, South Carolina

#### Plant Engineer

Responsible for engineering projects (capital and expensed), facilities and operations maintenance of a PVC, Color Concentrates, and Garden Hose manufacturing facility. Implemented preventative and predictive maintenance program. Developed and implemented a detailed calibration program which was critical in obtaining ISO 9002 certification. Organized a comprehensive maintenance training program which resulted in over three years without a recordable or lost time accident.

## February 1988Teknor Apex Companyto March 1993Pawtucket, Rhode Island

### Electrical Project Engineer

Description Designed electrical instrumentation, controls, and power distribution systems for manufacturing facilities throughout the country. Developed contract specifications and bid packages for projects. Acted as an on-site electrical project manager for Teknor-Apex. Project scopes involved construction, modification, and maintenance. Industries served included plastics, rubber and chemical. Chemical facilities were classified as Class I, Division II hazardous locations. Control systems involved programming of programmable logic controllers with 600 + I/O points utilizing PID (Proportional-Integral-Derivative) process control loops.

### **PROFESSIONAL ORGANIZATIONS**

InterNational Electrical Testing Association (NETA) Institute of Electrical and Electronic Engineers (IEEE) – Piedmont Section Secretary National Fire Protection Association (NFPA)

## **REGISTRATIONS and CERTIFICATIONS**

Registered Professional Engineer in Alabama (# 36389-E)			
Registered Professional Engineer in Connecticut (#PEN.0031485)			
Registered Professional Engineer in Florida (#PE87017)			
Registered Professional Engineer in Illinois (#062.067453)			
Registered Professional Engineer in Kentucky (#30988)			
Registered Professional Engineer in Louisiana (#45324)			
Registered Professional Engineer in Maryland (#48123)			
Registered Professional Engineer in Michigan (#6201063551)			
Registered Professional Engineer in New York (#096323-1)			
Registered Professional Engineer in North Carolina (#024330)			
Registered Professional Engineer in Ohio (#PE.81898)			
Registered Professional Engineer in Pennsylvania (#PE083875)			
Registered Professional Engineer in South Carolina (#18706)			
Registered Professional Engineer in Texas (#141126)			
Registered Professional Engineer in Tennessee (#00118343)			
Registered Professional Engineer in West Virginia (#21472)			
NCEES Record Number: 62206			

### PRESENTATIONS

2021	"Power Factor and Power Factor Correction Considerations from a Utility and User
	Perspective" - Virtual Training, February 2021

- 2020 *"Understanding the Impact of Power Quality Problems Defining Voltage Surges and Sags"* Savannah, GA, February 2020
- 2019 *"Interdisciplinary Investigations"* Charlotte, NC, February 2019, presented with Mr. Thomas Traubert, PE and Mr. Glenn Stewart, PE
- 2018 *"Understanding Programmable Logic Controller Language for Forensic Analysis or Who in the World is George Boole and Why Should I Care?"* February 2018
- 2016 *"HVAC Systems and Managing Power in Commercial Buildings,"* February 2016
- 2013 IEEE, Engineering in the Workplace, Clemson University

NFPA 70E Arc Flash Compliance, Teknor Apex Co., Jacksonville, TX

NFPA 70E Arc Flash Compliance, Teknor Apex Co., Pawtucket, RI

NFPA 70E Arc Flash Compliance, The Haywood Company., Brownsville, TN

### **CONTINUING EDUCATION**

2021 "Damage Assessment in Telecommunications Networks," February 2021
"Fire Alarm Systems," February 2021
"Photovoltaic & Energy Storage Systems," February 2021

	"Fire Investigations & NFPA921: An Education for Engineers," February 2021
2020	"Back to Basics: Fire Science with a Spark," February 2020 "Arc Flash – Hazards, Regulations, and Mitigation," February 2020 "Understanding Smart Home Networks," February 2020
2019	<i>"Basics of Insulation Resistance Testing</i> ," February 2019 <i>"Electrical Connection Failures</i> ," February 2019 <i>"Human-Machine Interfaces</i> ," February 2019 <i>"Lightning in Three Acts</i> ," February 2019
2018	"Methods of Equipment Protection," February 2018

- 2018 "Substations and Transformers: Maintenance and Testing," February 2018 "Transformer Damages: Unbalance Conditions and Ferroresonance," February 2018
- 2017 "Back-up Power Sources: Varieties and Applications," February 2017 "Engineering Analysis of Failure: Determination of Cause in a legal Environment," February 2017
- 2016 "Engineering Economics: Actual Cash Value Definitions and Calculations," Large Loss Forum -February 2016

"Power System Protection and Fault Analysis," February 2016

2015 OSHA Confined Space Training, January 2015 Investigation of Gas and Electric Appliance Fires, April 2015 "Risk Management for Engineers," July 2015