

SEMINAR #1

Title: Grounding of Electrical Systems

Speaker Bio: Phil Wentz – McClure Engineering Associates

Phil Wentz is an electrical engineer and Principal for McClure Engineering for the past 25 years. His career started 30 years ago designing audio video systems and has expanded in low voltage and medium voltage design since joining McClure. He is a past Chairman, committee chair for education and teaches the 10-hour grounding course for EBMI. Mr. Wentz is a registered professional engineer in multiple states.

SEMINAR #2

Title: Impact of Large-Scale EV Charging on Electrical Distribution Systems and Ameren Missouri Time of Use Rates Explained

Speaker Bio: Elvis Phung and Steve Wills – Ameren Missouri

Elvis Phung is a Low Voltage Planning Engineer at Ameren. Elvis creates one-lines of feeders layout for new distribution (4kV or 12kV) substations. Plan for 4kV to 12kV conversions to address overload issues and to standardize on 12kV as the common distribution voltage. Run studies for DER penetration on the distribution circuits to determine voltage flicker and reverse power flow. Provide technical engineering review and user support for distribution load flow analysis tool – Synergi. He received a Bachelor of Science in Electrical Engineering (Spring 2020) from Missouri University of Science Technology.

Steve Wills is the Director of Regulatory Affairs for Ameren Missouri. Steve has worked at Ameren for nineteen years in a variety of roles related to load research and forecasting, resource planning, structured transactions, and utility regulation. In his current role, Steve has

responsibility for Ameren Missouri's filings in front of the Missouri Public Service Commission relating to a wide range of topics including rate reviews, resource plans, certificate applications needed to construct or acquire new generation sources, customer program proposals, and tariff updates. He also worked in a related role for Ameren Illinois from 2015 through 2017. Prior to coming to Ameren, Steve worked in a regulatory role for Laclede Gas Company. Steve holds an M.B.A. from St. Louis University.

SEMINAR #3

Title: Lighting and Controls for the Healthcare Environments

Speaker Bio: Michelle Prew – Cooper Lighting Solutions

Michelle Prew has had an extensive career in the lighting industry for over 35 years. She is currently celebrating her 20th year as a Specification Sales Manager for Cooper Lighting. Prior to Cooper, Michelle was the Electrical team lead at a consulting firm in the Detroit area. She grew up in the Lighting industry and studied Electrical Engineering at Lawrence Institute of Technology.

Michelle is an active member of the Illuminating Engineering Society (IES) and has served in many roles during her 27 years of membership. From serving on the local IES section in Detroit as President early on, she advanced to participating on many technical committees to IES Midwest Regional Director to sitting on the Board of Directors at the Society. She was most recently bestowed the honor of the Distinguished Service Award from the IES.

SEMINAR #4

Title: Designing a Daylight System – Finding the Right Shading Solution

Speaker Bio: Scott Hussar – Lutron Electronics Co., Inc.

Scott Hussar is an Account Manager for Lutron Electronics and focuses his efforts on working with specifiers, installers and users of commercial lighting control systems and automated window shade systems. Scott focuses much of his time in and around his hometown of Chicago, but supports the commercial specification efforts of 8 Lutron rep firms covering 12 states in Lutron's North Central Area of the United States. Scott has been part of the Lutron family for over 22 years and has been focused on commercial system designs and specifications for the past 17 years.

Scott devotes a large part of his time assisting architects, engineers and lighting designers in developing lighting and shading control system designs, budgets and sequences of operation for new construction projects as well as major renovations and retrofits. Scott is actively engaged in educating designers, developers and end users about how to use light control systems to reduce electrical costs and emissions while providing a more productive and enjoyable workplace for employees.

Outside of work, Scott loves to camp, is an avid gardener, and makes the best hot pepper sauces and jellies in Crystal Lake. Scott has two grown children, Jackson a mechanical engineer and Jenna a registered nurse and has been married to his wife Christine for 32 years.

SEMINAR #5

Title: Electrification (1st Segment)

Speaker Bio: Dan Bowermaster – EPRI, Barry Frazier – Ameren Illinois, Becky Whitman – Ameren Missouri

Dan Bowermaster is the Head of EV Research (Senior Program Manager for Electric Transportation) at the Electric Power Research Institute

(EPRI), an independent non-profit center for public interest energy and environmental research.

For more than 30 years, EPRI's electric transportation program has provided research critical to the development of technology, infrastructure, and analytics necessary to support the advancement of electric transportation.

Dan has a Bachelor of Science in Mechanical Engineering and a Bachelor of Arts in International Relations from the University of California, Davis. He also has an MBA from Wharton as well as a Master of Arts in International Studies from the University of Pennsylvania. He's worked in the electric vehicle industry for 12 years, including two years at Pacific Gas & Electric which he joined after graduating from Wharton in 2008.

Dan has moved 24 times since high school. He and his wife now live in San Francisco with their three young kids. His passions include old Jeeps, big dogs, and an off-the-grid family cabin from the 1930s.

Barry Frazier has an extensive background in energy trading, operations, risk management and business development. Previous responsibilities in worldwide crude oil procurement and trading, gasoline/diesel marketing, refinery and biofuel operations, power trading and pipeline/biofuels business development.

Becky Whitman is the Business Development Manager for Electric Vehicles and Charging at Ameren Missouri. An EV driver herself, she enjoys engaging with the public, businesses and vehicle dealerships in Ameren Missouri's territory and serving as a resource for all things related to EV charging. While new to the Ameren team, Becky previously worked for Honeywell, a contractor for Ameren, implementing a residential energy efficiency program for gas and electric customers.

Seminar #6

Title: VFD Applications, Benefits, Detriments and Installation Best Practices

Speaker Bio: Charles Hummer – Agilix Solutions

Charles Hummer is a 2000 graduate of University of Missouri – Rolla, now called Missouri S&T and worked his first 15 years of his post graduate career in the integration/automation industry with GE Automation Services and LDP Consulting Engineers. For the past 8 years Charles has worked in the capacity of Product Manager for Power Products at a local distributorship focusing on VFD, MCC and MV products. In his 20+ years of experience Charles has worked on projects that have focused on the running and control of motors utilizing the various technologies across many industries including mining, food/beverage, pharmaceutical, water, rendering, power generation and data center facilities.

SEMINAR #7

Title: Emergency Lighting Codes and Standards

Speaker Bio: Anita Majumdar – Acuity Brands

Anita Majumdar is the Director, Specification Sales for Acuity Brands, a leader in innovative, commercial, residential, industrial, hospitality and controls solutions. A Sales Leader with over 15 years of lighting industry experience, Ms. Majumdar joined Acuity Brands in December 2015. Involved within the Central U.S. WILD, IES and various lighting associations as well as active volunteering in the Chicagoland community.

Prior to joining Acuity Brands, Ms. Majumdar was with Juno Lighting Group holding various positions. Anita is located in Des Plaines, IL outside of Chicago.

SEMINAR #8

Title: Electrification (2nd Segment)

Speaker Bio: Sacoyya Davis – Ameren Missouri; Kenneth Kresyman – Ameren Missouri; Bill Reany – Ameren Illinois; John Maue – Ameren Missouri; Jeff Brinker – Ameren Missouri

Sacoyya Davis manages the EV Charging Incentive Program and the Electrical Vehicle Partner Network. She works closely with business customers and contractors to get EV charging installed at business locations. She is passionate about ensuring that no one is left behind when it comes to access to EV charging infrastructure. Sacoyya enjoys spending time with her husband, three sons and an energetic grand dog.

Ken Kresyman Jr. Is the Business Development Manager Fleet Electrification EV for Ameren Missouri, an advocate and family man, Ken is working to accelerate EV market adoption in the Ameren MO territory. An automotive industry veteran, Ken has a background in driving profitable growth through creative strategy, innovative solutions, and efficient execution across a wide range of global product

portfolios. Ken currently sits on the parish council at St. Joseph's in Cottleville and is Vice President of the EPA Clean Cities St. Louis Advisory Board. Ken's role within Ameren Missouri is focused on developing utility programs to support fleets seeking to electrify; providing planning and implementation support to help Ameren's business customers navigate their electrification journey.

Bill Reany is the Manager of Efficient Electrification and Product Development for Ameren Illinois. He has served in a variety of capacities since joining Ameren in 2010. He currently oversees electrification strategies and customer-facing programs, which include facilitating the adoption of electric vehicles for residential and business customers. His team develops new programs and services for a cleaner energy future that will help Ameren Illinois offer that transition to all of their energy delivery customers. Mr. Reany's engineering and technology background helps to foreground a focus on renewable and alternative energy — including building out charging infrastructure and delivering innovation and customer education that enhance the traveling experience of EV owners — while also expanding the development of natural gas services throughout the Ameren Illinois service territory.

In addition to degrees in electrical and electronics engineering from University of Missouri-St. Louis and Washington University in St. Louis, Mr. Reany also holds an MBA in data analytics from Southern Illinois University Edwardsville and has completed postgraduate studies in microgrid technology.

John Maue is a Business Development Manager-Off Road Technologies at Ameren Missouri with over 30 years in the electric industry. Specializing in helping customers understand how best to power the mobile assets through consultative measures.

John is a father of 3 grown children. Away from Ameren, he is an avid sailor, plying the waters of Lake Michigan.

Jeff Brinker is the Ameren Business Development Manager, Commercial HVAC, Water Heating and Foodservice. He is married and the father of 2 USAF Officers (Pilot Daughter, Nuclear Engineer Son).

Jeff lives near Washington, MO. And his focus with Ameren is the Commercial HVAC, Water Heating and Foodservice Sectors as part of our Electrification and Sustainability Initiative. He is a former national award winning contest BBQ competitor (yes, you may have seen him on The Travel Channel), owned and operated a quite successful large scale catering business for 15 years, while at the same time enjoying success in the factory automation and overhead crane industry for ~20 years, with 10 years before that in sales and product management roles serving the electric motor industry with a focus on HVAC Air Moving Motors and Blowers, and Commercial Building Control.

SEMINAR #9

Title: Solar Opportunities for Your Commercial Facility

Speaker Bio: Craig Pals – Tick Tock Energy, Inc.

Craig Pals is co-founder of Tick Tock Energy, Inc based in Effingham, IL started in 2006. Besides overseeing day-to-day company operations with brother Eric, Craig leads development and implementation of medium & large commercial solar projects from 25 kW to over 2 MW. Craig has over 31 years of broad experience in renewable energy and energy-efficiency applied in commercial, industrial, farm, and residential sectors. He has been involved with all types of technologies such as solar, small wind, HVAC, refrigeration, lighting, cogeneration, controls, and more. Craig obtained his mechanical engineering degree from

California State University, Long Beach, is a licensed Professional Engineer in the State of California, and Certified Energy Manager (CEM). Craig's vision was instrumental in establishing Tick Tock Energy as one of the earliest companies in Illinois, and the US for that matter, to offer solar in the Midwest. Tick Tock Energy has been named Top 500 Solar Contractor in the U.S. continuously since 2015 and primarily focuses on solar development in Illinois and adjacent states of Indiana and Missouri.

SEMINAR #10

Title: Energy Codes – A Facilities Perspective

Speaker Bio: Ryan Smillie - Signify –

Ryan Smillie is the Specification Sales Leader, Commercial Channel for Signify, Genlyte Solutions brands. He is a 15 year veteran of the Lighting and Lighting controls industry with experience in Product Management and Product Marketing, in addition to Sales. He has worked in markets across the United States and understands the variety of Energy Codes standards across country, including Title 24 in his home state of California.

SEMINAR #11

Title: Energy Storage Technology and Applications

Speaker Bio: Haresh Kamath – Electrical Power Research Institute (EPRI)

Haresh Kamath is Director for Distributed Energy Resources (DER) and Energy Storage at the Electric Power Research Institute (EPRI), managing the Institute's research into the development, assessment, and application of energy storage technologies for grid storage applications as well as the implementation and integration of storage, distributed generation, smart inverters, microgrids, and other distributed resources into the grid.

Haresh joined EPRI in 2002 as a project engineer in energy storage and distributed generation. During his tenure at EPRI, he has conducted research in energy storage, electric transportation, energy efficiency, DER integration, nanotechnology, and technology innovation. He was an author for the first edition of the *EPRI-DOE Handbook of Energy Storage*. In 2013, Kamath took steps to create the EPRI Energy Storage Integration Council (ESIC), a technical forum to facilitate the deployment and use of utility-scale energy storage systems.

Before joining EPRI, Kamath worked at Lockheed Martin Space Systems as a product engineer responsible for spacecraft batteries. He also served as an applications engineering and business development manager at a startup energy storage company.

Kamath received his Bachelor's and Master's degrees in chemical engineering from Stanford University.

SEMINAR #12

Title: Code Issues Seen by Electrical Inspectors

Speaker Bio: Rick Hill – St. Louis County

Rick Hill has 35 years in electrical code enforcement as an electrical inspector, assistant chief electrical inspector and chief electrical inspector. He is licensed and Certified electrical inspector and plans

examiner Rick has served as a Past board member EBMI and Past president of the St. Louis IAEI.

SEMINAR #13

Title: Distributed Energy Resources and Microgrids – Powering Our Future

Speaker Bio: Chad Kennedy – Schneider Electric

Chad Kennedy is the Director, Industry Standards for Schneider Electric. In this position, Mr. Kennedy is responsible for managing company activities relating to codes and standards for Microgrids, Energy Storage, Electrical Vehicles, Renewable Energies, Energy Management and Power Equipment products.

Mr. Kennedy is a resident of Columbia, South Carolina, USA. He holds Bachelor of Science and Master of Science degrees in Electrical Engineering from the University of South Carolina and is a registered Professional Engineer in the state of South Carolina.

Mr. Kennedy is a member of NFPA, serving on the NEC Correlating Committee, Code-Making Panels 13 and 15, NFPA 855 Installation of Energy Storage Systems, NFPA 3 & 4 Commissioning of Fire and Life Safety Systems, and NFPA 99 Health Care Facilities Code Electrical

Systems and Correlating Committee. He also participates on the NFPA Advisory Committee on Electrical Safety Research.

Additionally, he participates in the development and application of microgrid, energy storage, renewable energy solutions and the integration of metering within new and existing equipment for these systems. He is the Chair of the NEMA 8ES Energy Storage Section, an active member of NEMA 8DA Distributed Automation and NEMA 8TP Transformer Sections, and a voting member of IEEE 2030.10 standards for dc microgrids. He is also active in UL, NEMA, and IEEE technical committees associated with power equipment standards, application and design.

SEMINAR NEC

Title: ANALYSIS OF CHANGES, 2023 NEC/CODE CONFERENCE

Speaker Bio: - Thomas A. Domitrovich – IAEI;

Thomas A. Domitrovich is an Electrical Engineer within Eaton Corporation's electrical group with experience in engineering, sales & marketing, business development and product management. *He* is actively involved with various electrical industry organizations and focuses on the continued growth of electrical safety.

Thomas is an author with a wide range of trade magazine articles including columns in two industry trade magazines. He sits on NFPA Code Making Panels 2 and 10 for the continued development of the National Electrical Code (NFPA 70). He is also on other NFPA committees including NFPA 73, 78, 1078, 110, and 111 and chairs various committees for other electrical industry organizations.

He is a LEED® Accredited Professional, a licensed Professional Engineer and holds a Bachelor of Electrical Engineering from Gannon University.

SEMINAR #14

Title: Critical Power/Generators

“Benefits of Paralleling Generator Sets” – Don Dentino – Alterra Power; “NEC Article 700” – Frank Kurz – CK Power Systems; “Generator Installation and Application Basics: Cooling, Sound and Fueling” – Mike Munson – Cummins Sales and Service; “NFPA 110: Standard for Emergency and Standby Power - Systems” – Chris Zahari – Fabick CAT; “Generator Sizing” – John Sharpe – Generac Industrial Power

Don Dentino of Alterra Power has over 35 years of technical and commercial experience in the electric power generation industry. He has held numerous positions related to the application and sale of gas & diesel generator sets into emergency standby systems. His experiences include roles as a nuclear power plant - electrical operator & technician, paralleling controls/Switchgear sales engineer and Electric Power controls strategy consultant. Additional product experience includes Automatic Transfer Switches, Uninterruptible Power Supplies and Station Battery Systems.

Frank Kurz of CK Power has 46 years in the Power Generation Industry. Cummins Certified Journeyman Diesel/Generator Mechanic, Cummins Project Manager, Cummins-Detroit-Waukesha Power Systems Director, Caterpillar Engineering Manager, with the last 7 years at CK Power. Present position is Sr Power Systems Engineer.

Mike Munson has been with Cummins for over 19 years and has over 34 years of experience in the power generation and power distribution

industry. During his time with Cummins Mike has held various positions assisting consulting engineers with design and application of emergency standby power generation systems including paralleling control and switchgear design. Prior to joining Cummins Mike worked in sales and engineering management for an independent switchgear manufacturer specializing in utility power distribution equipment. Mike has a degree in Electrical Engineering from the Milwaukee School of Engineering.

Chris Zahari of Fabick CAT is a graduate of Missouri S&T with a degree in Mechanical Engineering. Following graduation, Chris began his career at Fabick Power Systems as a Project Manager supporting the Electric Power Division. Through his 7+ years in this capacity, Chris managed numerous large scale, complex Electric Power projects through the St. Louis and surrounding regions. In 2021, Chris moved to Electric Power Account Manager where his vast technical expertise and experience in electrical power systems is focused on the front end of design support and sales of electric power systems. Chris brings close to 10 years of knowledge in the Critical Power industry and serves as a valued resource to his peers and customers alike.

Jay Elmore PE of Generac Power Systems is a licensed Professional Engineer with over 15 years in the Industrial Power Industry occupying multiple electrical engineering roles. He currently serves as the Power Solutions Manager for Generac Power Systems Inc. supporting three industrial distributors throughout a territory in eight states with specific responsibilities of supporting the consulting engineer community, the design of large projects and launching of new products.

SEMINAR #15

Title: The Five Principles of Outdoor Lighting

Speaker Bio: Lane Wallis – CREE Lighting

Lane Wallis has been in the industry for over 24 years. She has been on the contractor, distribution and agency sides of the business and now works as a Regional Manager for CREE Lighting. Lane began her career in the residential sector and moved into the commercial market through distribution sales at Western Extralite Company in Kansas City. She then moved to the agency side of the business, working for two agencies in the KC area who both represented CREE Lighting. Knowing the brand, it was an easy transition to arrive at CREE Lighting over a year and a half ago. Lane is past President and Vice President of the IES Kansas City chapter. She lives in Kansas City with her husband, and they enjoy golf and spending time with their grandchildren.

At CREE Lighting's 650,000-sqft Racine, WI headquarters, you'll find a highly skilled, hard-working team using the latest technologies to design, test and build nearly every solution in our portfolio. From NanoOptics® to WaveMax® Technology, SmartCast® Wireless and Cadiant® Dynamic Skylight, we turn technology breakthroughs into best-in-class solutions that solve our customers' lighting challenges without compromise. Our midwestern craftsmanship makes our customers loyal to CREE Lighting, a USA made proud manufacturer! Better light built close to home. That is CREE Lighting!

SEMINAR #16

Title: Human Centric Lighting

Speaker Bio: Anita Majumbar – Acuity Brands

Anita Majumdar is the Director, Specification Sales for Acuity Brands, a leader in innovative, commercial, residential, industrial, hospitality and controls solutions.

A Sales Leader with over 15 years of lighting industry experience, Ms. Majumdar joined Acuity Brands in December 2015. Involved within the Central U.S. WILD, IES and various lighting associations as well as active volunteering in the Chicagoland community.

Prior to joining Acuity Brands, Ms. Majumdar was with Juno Lighting Group holding various positions. Anita is located in Des Plaines, IL outside of Chicago.

SEMINAR #17

Title: Arc Flash Hazards and Arc Energy Reduction

Speaker Bio: Dan Neeser – Eaton’s Bussmann Division

Dan Neeser is a Sr. Field Application Engineer with Eaton’s Bussmann Division. He had been associated with Eaton (Cutler-Hammer and Bussmann) since 1993 and specializes in training on the design and application of overcurrent protective devices and equipment in electrical distribution systems in accordance with the National Electrical Code® and equipment in accordance with the various product standards. He participates in IEEE (Senior Member) with Industrial and Commercial Power Systems, NEMA, NFPA (committee member for NEC CMP-1 and CMP-13 and NFPA 79), UL (508/60947 and 508A) and IAEI activities.

SEMINAR #18

Title: How Healthy Can a Building Be – Understanding WELL vs. LEED

Speaker Bio: Michelle Prew – Cooper Lighting Solutions

Michelle Prew has had an extensive career in the lighting industry for over 35 years. She is currently celebrating her 20th year as a Specification Sales Manager for Cooper Lighting. Prior to Cooper, Michelle was the Electrical team lead at a consulting firm in the Detroit area. She grew up in the Lighting industry and studied Electrical Engineering at Lawrence Institute of Technology.

Michelle is an active member of the Illuminating Engineering Society (IES) and has served in many roles during her 27 years of membership. From serving on the local IES section in Detroit as President early on, she advanced to participating on many technical committees to IES Midwest Regional Director to sitting on the Board of Directors at the Society. She was most recently bestowed the honor of the Distinguished Service Award from the IES.

SEMINAR #19

Title: Digital Protective Relay Basics

Speaker Bio: Nathan Leonard – Automation Schweitzer Engineering Laboratories

Nathan Leonard is an Associate Project Engineer at Schweitzer Engineering Laboratories (SEL) Fairview Heights, IL office. He has been with SEL Engineering Services since 2021 after receiving a bachelor's degree in electrical engineering from SIUE. Nathan has experience in programming, design, and commissioning of SEL automation controllers, protective relays, and distribution automation schemes.

