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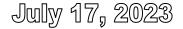
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Vol. 114 No. 7



FEES FOR ALL SEMINARS INCREASE BY \$60 ON AUGUST 1st

ANALYSIS OF CHANGES, 2023 NEC CODE CONFERENCE Only 50 spots left to receive analysis book-Sign up soon August 24th

at St. Charles Convention Center

This Code Conference will fulfill the 8 hour-code City of St. Louis' and Jefferson County license requirement for continuing education provided THE LICENSEE attends the full eight hours of the Conference. You MUST attend BOTH sessions AND make sure your badge is scanned each time!

Please register on-line at www.electricalboard.org

Look for the attendee registration link to start your registration. Once you are registered, you will be emailed a confirmation letter with a QR Code. Bring this QR code (printed or digital) to the registration area to scan QR code and get your badge. You will also receive a ticket for the Analysis Book and ticket enter seminar for the afternoon session. WE WILL NOT TAKE REGISTRATIONS OVER THE PHONE!

7:20 a.m. – IAEI Eastern Missouri Chapter Mtg. 7:30 – 11:30 a.m. (1ST SESSION) 2:00 – 6:00 p.m. (2ND SESSION) Attendees must attend BOTH sessions to receive certificate, which is mailed8 weeks after seminar. PDH: 8 and Jefferson County/City of St. Louis: 8- Code related

Speaker: Thomas Domitrovich, IAEI Q & A Panel: Rick Hill, St. Louis County Inspection Brian DeCarlo, St. Louis City Inspection

This presentation reviews and analyzes key changes to the 2023 National Electrical Code by highlighting and explaining revisions to residential, commercial and industrial design and installation requirements. This seminar helps professionals learn the significant changes on topics such as conductors, grounding, surge protection and outdoor emergency disconnects for dwelling units.

The fee for the Code Conference is \$275 with registrations made before 8-1-23 and \$335 for registrations made after the 8-1-23 deadline. This fee includes LUNCH and the book "Analysis of Changes, 2023 NEC" which first 300 registrants will receive and can be picked up the morning of the conference. This analysis book covers almost 400 changes made in the 2023 NEC. A PHOTO ID IS REQUIRED TO RECEIVE THE ANALYSIS BOOK AT INSPECTORS TABLE.

The revised 2023 Analysis now concisely answers three critical questions:

- What is the Change?
- Why was it made?
- How the change impacts the electrical industry?

SEE ENTIRE LIST OF SEMINARS AT www.elecctricalboard.org



Message from our outgoing Chairman

Phil Wentz

It has been a pleasure to serve as Chairman of the Electrical Board during 2022-23.

The focus during my year as Chairman was planning the many activities of the Electrical Expo. I want to thank the Expo Co-Chairs, all the Committee Chairs and everyone serving on committees or volunteering at the Expo. We should all assist them in promoting the Expo to our associates and customers.

I will quickly touch on some other items that occurred during this year.

Kiefer Bonfanti completed the audit in October that was authorized at our December 2021 Board meeting. The audit was for fiscal year 2021-22.

We thought we would have a new accounting firm by November or December but that was not the case but we have now hired Bolk Tax Service to handle our accounting needs. I thank Jeff Stoyanov for his efforts in securing a new accounting firm.

Lastly, I'm a history buff and understand that we already have history book (A Century Plus of Electrical Progress – A History of the Electrical Industry in Metro St. Louis) that was published in 1983. I first saw the book at our June Board meeting and I'm sure many of you have not seen the book. Many new companies have formed since 1983, new management teams have taken over some companies in the book. My question is do we want to consider putting together another history book? More to come on this topic.

I certainly thank all the Committee Chairs and volunteers that helped organize our events and programs, not just the Expo during the year.

IN CLOSING, IF YOU HAVE NOT REGISTERED FOR THE EXPO, PLEASE DO SO NOW AND ENCOURAGE CUSTOMERS AND ASSOCIATES TO REGISTER.

LET'S MAKE ELECTRICAL EXPO 2023, THE BEST EVER. REGISTER AT <u>www.electricalboard.org</u>. See calendar on <u>www.electricalboard.org</u>

AUGUST 23-24

REGISTER NOW!!! ELECTRICAL EXPO

We have 1500 already registered August 23-24, <u>2023</u> At St. Charles Convention Center

Sept. 12th	EBMI Education classes begin See class booklet on our website
Sept. 18th	GOLFfest At Crescent Farms Golf Course
NOV. 30th	CHRISTMAS MIXER at St. Charles Convention Center

Call EBMI at 636-305-6434 for more information or to gain more information on any of our events or visit our website at <u>www.electricalboard.org</u>. You can also send an email to <u>annie@electricalboard.org</u> or <u>bill@electricalboard.org</u>.

CONNECT-4-SUCCESS

WANT TO SERVE AS AN ADVOCATE?

For the past several years, C4S has been working with Ritenour High School to allow some seniors to go to school in the morning and work at one of our partner companies. This program will continue for 2023-24 school year.

But this past year, we started the **Ritenour Advocacy Program (RAP)** which is an advocacy program with several C4S Board members and Ritenour students. We learned a lot during this first try at mentoring and have decided to expand the number of advocates participating in this program.

Before you say YES, and we hope you do, we need to send you the criteria for being a mentor. You must obtain a fingerprint background check, a volunteer registration with the state of Missouri, complete Ritenour Volunteer application and attend a 1-hour training session with Ritenour personnel. We use in-person and zoom meetings (about 30 minutes) during the morning hours (not sure of the time period just yet) and everyone must have a gmail account. Must attend 2 in-person meetings at Ritenour as aweel as 4-5 meetings with student (either zoom or inperson).

There is a fee to participate of about \$55 for background checks. IF you are still interested, please email <u>annie@electricalboard.org</u> prior to August 10th and she will send our RAP flyer to you. It is a very rewarding experience, but there is a considerable time commitment.

ELECTRICAL EXPO SEMINARS

Seminar fees increase by \$60 per person after August 1st

Seminars 1-13 held on Wednesday Seminar 14-19 and code on Thursday

You can see all 20 seminars on our website – <u>www.electricalboard.org</u> and click on seminar brochure or email <u>bill@electricalboard.org</u> to receive seminar brochure.

Seminar Fees for Seminars 1-19 before August 1st...

1-Day pass – Wed or Thurs. - **\$110** (\$170 after 8-1) 2-day pass - Wed. & Thurs. - **\$160** (\$220 After 8-1)

Seminar fee for the Code Conference on Thurs – 8-24 \$275 (\$335 after 8-1). Must attend both sessions – see front page of FLASH For more details

Wednesday Seminars – (Cont.)

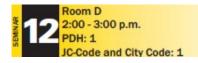
Seminar 1-13



ENERGY STORAGE TECHNOLOGY AND APPLICATIONS

Speaker: Haresh Kamath - Electric Power Research Institute (EPRI)

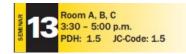
The presentation will provide an overview of the energy storage technology landscape and an understanding how energy storage can be used as an asset to maintain or improve grid reliability and operations. There will be discussion on technical challenges facing the wider use of energy storage and what can be done to address those challenges. The participants will learn: • Driving energy storage adoptions. • How energy storage can be used to support grid applications. • Energy storage attributes, including performance, safety, environmental considerations. • Landscape of commercial and emerging technologies. • Publicly available resources.



CODE ISSUES SEEN BY ELECTRICAL INSPECTORS

Speaker: Rick Hill - St. Louis County

This will be a rapid-fire question and answer period with moderator and an electrical inspector on issues that he has been addressing lately. The electrical inspectors will address individual questions from 1:00 to 2:00 p.m. and 3:30 to 4:30 p.m. in the front of the Exhibit Hall. This seminar will discuss: • A listing of electrical products • Common products with listing issues • Lighting retro fits/upgrades • Supply chain issues • The number of services allowed by 230.2 • Swimming pools • Solar PV taps • Aluminum wiring modifications • HDPE conduit • Protection of equipment.



DISTRIBUTED ENERGY RESOURCES AND MICROGRIDS – POWERING OUR FUTURE Speaker: Chad Kennedy – Schneider Electric

This presentation will discuss the installation of microgrids, energy storage systems and other distributed energy resource systems that bring new flexibility and challenges in the use of electricity. This program will focus on the codes and standards landscape in this space and the changes which address how these systems can be safely deployed.

The participants will learn: • The importance of NFPA 855 in the installation of Energy Storage Systems (ESS). • How NEC Article 706, the product standard UL 9540 and special testing UL 9540A work together and what an AHJ needs to know to approve an Energy Storage Installation. • The impact of NEC requirements on the connection of onsite sources into the premises wiring system. • How the implementation of DER and microgrids impact the power system and what challenges are introduced. • The allowances for using DER and microgrids as emergency system sources

Thursday Seminars Seminars 14-19

14 Room D 8:00 - 10:00 a.m. PDH: 2 JC-Code: 2

CRITICAL POWER / GENERATORS

Benefits of Paralleling Generator Sets

Presented by Don Dentino of Alterra Power While operating multiple generator sets in parallel has been practiced for many years, evolving technologies and current market conditions warrant a fresh look at the benefits of this practice

NEC Article 700

Presented by Frank Kurz of CK Power Systems EPO, Portable Generator Connection, Start Circuit Monitoring, Start Time, Separation

<u>Generator Installation and Application Basics: Cooling,</u> <u>Sound, and Fueling</u>

Presented by Mike Munson of Cummins Sales and Service This segment seeks to bring awareness to some of the most crucial mechanical design considerations for a generator set. NFPA 110:

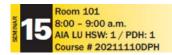
Standard for Emergency and Standby Power Systems

Presented by Chris Zahari of Fabick CAT

Presentation will include a general overview of NFPA 110 and key segments that are commonly overlooked when applying and reviewing NFPA code requirements.

Generator Sizing

Presented by John Sharpe of Generac Industrial Power This segment will present methods and calculations for proper sizing of engine generators.



THE FIVE PRINCIPLES OF OUTDOOR LIGHTING

Speaker: Lane Wallis – CREE Lighting Transformational technologies can dramatically shift industries seemingly overnight. LED luminaires, driven primarily by economic value, had such an impact on the lighting industry. Still, short of significant economic benefit, change for the lighting industry and its stakeholders seems to move slowly. Aligning and agreeing on important principles across the industry is also made difficult by multiple sales channels and diverse industry participants, including "purchasers of light". Purchasers of light are typically non-lighting professionals, frequently relying on others for guidance and are often price conscious, disproportionally valuing low cost over highest value. In this seminar we consider the IES and IDAs jointly adopted resolutions regarding the Five Principles for Responsible Outdoor Lighting. What are they and how can we, as lighting influencers, help educate the industry and apply these principles for better outcomes in our outdoor environments, while implementing highest valued solutions for our customers? This seminar will: • Explore the motivation behind the Five Principles for Responsible Outdoor Lighting. • Review and understand the guidance within the Five Principles for Responsible Outdoor Lighting. • Provide examples of strategies, at the application level (parking lots and street lighting), for better results as it relates to the Five Principles for Responsible Outdoor Lighting. • Assess the potential economic value of the Five Principles for Responsible Outdoor Lighting for "purchasers" of light.



HUMAN CENTRIC LIGHTING

Speaker: Anita Majumdar – Acuity Brands

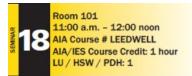
This presentation is an introduction to Human Centric Lighting, to optimize design aesthetics, increase productivity, and improve the health and well-being of humans in an architectural environment.

Participants will: • Understand the potential of Human Centric Lighting in context with non-lighting factors. • Be able to apply color temperature & color quality in more optimal and creative ways. • Recognize the growing body of research on the relationship between light, human circadian rhythms, wellness and productivity. • Be empowered to begin applying Human Centric Lighting principles in your projects.



ARC FLASH HAZARDS AND ARC ENERGY REDUCTION

Speaker: Dan Neeser, – Eaton's Bussmann Division This seminar will discuss the basics of arc flash hazards and the history of the arc energy reduction requirements in the NEC. Methods of compliance for circuit breakers (NEC 240.87) and fuses (NEC 240.67) including documentation and performance testing as added in the 2020 NEC will be discussed. Tools and resources for calculation of arcing current and determining clearing time or operation of arc energy reduction methods will be utilized. Participants will learn: • Arc Flash Hazard Basics • History of Arc Energy Reduction Requirements • Compliance with NEC 240.87 • Compliance with NEC 240.67 • Tools and Resources for Complianc



HOW HEALTHY CAN A BUILDING BE – UNDERSTANDING WELL vs. LEED Speaker: Michelle Prew – Cooper Lighting Solutions

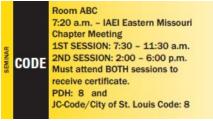
Welcome to the WELL Building Standard! This presentation will cover the WELL standard and how it compares to LEED. We will take a look at the certifications to allow a better understand ing of how the two standards differ. You will learn how each standard is scored and ultimately learn how to apply the appropriate standards to create your "healthy" building. The participants will: • Gain a basic understanding of LEED (Leadership in Energy and Environmental Design) standard. • Gain a basic understanding of the WELL standard. • Learn how the WELL Building Standard differs from LEED. • Review the scoring systems of both standards. • Understand how to apply the appropriate standard to create your "healthy" building.



DIGITAL PROTECTIVE RELAY BASICS

Speaker: Nathan Leonard – Schweitzer Engineering Laboratories (SEL)

Discuss the basics of digital relay operation, relay logic, protection requirements and protection system elements that are found in protective relays. Participants will learn: • Basics of relay logic. • Protective system elements and how they operate. • How relay word bits affect relay I/O. • The role that protective relays play in a power system. • The different types of faults that occur in a power system and how protective relays deal with these faults.



INFO ON FRONT PAGE

Even if NOT attending seminars, make plans NOW to register for the Expo only.



QR code takes you to our website to register

www.electricalboard.org

POSITION AVAILABLE

4223 - ELECTRICAL SALES REPRESENTATIVE

Location: Missouri, Kansas, Iowa, Nebraska

We are seeking an experienced Electrical Sales Representative to join our team and call on current, and new, customers in the states of NO, KS, IA and NE. The ideal candidate will have a proven track record of successful sales in the electrical industry, a deep understanding of electrical products and services, and excellent communication skills.

Full details at <u>www.electricalboard.org</u>. If you are interested in this opportunity and meet the qualifications, please submit your resume and cover letter to Mike Skovran at

mskovran@emspartnersinc.com. We look forward to hearing from you!

5123 – ESTIMATOR AND PROJECT MANAGER

Pyramid Electrical Contractors is seeking an estimator and project manager, each with a minimum five years experience for the St. Louis/Metro East area. A strong understanding of McCormick estimating software and commercial experience are preferred. Please send your resume to Mike Kemper at mkemper@pyramidelectrical.com.

6123 – ASSOCIATION PRESIDENT

The Electrical Board of Missouri and Illinois (EBMI) was founded in 1909 representing the many segments of the Electrical Industry. The staff consists of two full-time employees: President and Executive Assistant. Our mission is to provide programs and services that educate, communicate and connect our members, the community and our evolving industry.

EBMI is eager to identify a hands-on association executive who is prepared to build upon the current successes of the Association. The successful candidate will serve as EBMI President, overseeing the operations and activities of the Association. Reporting directly to the Board of Directors, this position administers and implements Board policy and maintains an effective staff and volunteer-base to assure attainment of the Association's goals. With a staff size of two, the President will be intimately involved in the day-to-day operations of the Association.

The ideal candidate for this position is a highly motivated, resultsdriven executive who exudes passion for our mission. Working in a small office, this is a very hands-on position requiring a candidate who is self-directed and willing to get the job done. Interested in applying?

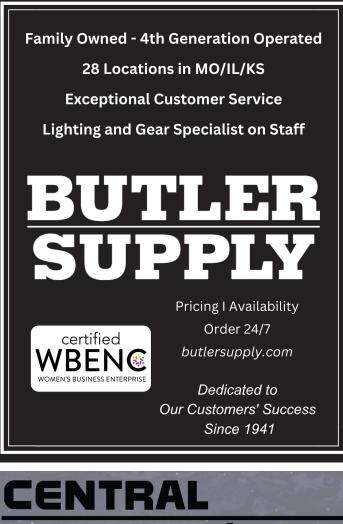
Please send your resume to resumes@electricalboard.org.

An Equal Opportunity Employer

POSITION WANTED

6A23- IT POSITION

Individual seeking a full-time position in Information Science and Technology where my education and skills will benefit the company and contribute to its long-term growth and success. Skills include SAP Analytics Cloud; SAS Viya; Eclipse; Java; Word, Excel and Powerpoint. Call EBMI for resume.



POWER SYSTEMS & SERVICES CRITICAL POWER EXPERTS YOU CAN COUNT ON

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UPS systems

Lighting inverters

• Busways

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ASCO

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74

Available from:

GOLFfest is a FUNfest!

MONDAY, SEPTEMBER 18, 2023 FOURSOME RESERVATION

https://form.jotform.com/71766087011152

*TO CON complete sponsors * <u>All pay</u> i	elay in reserving your foursomenormally sells out quickly!! <u>NFIRM YOUR FOURSOME, CLICK ON JOTFORM LINK ABOVE</u> e ALL information regarding extra contests in box below. If ship (full/shared) or attendance prizeTHIS IS NEEDED WHE <u>ments must be received prior to September 1st</u> . If interester	TO MAKE IT SIMPLER!!! emailing only to confirm a fourso N SENDING OUT INVOICES as each d, you MUST DO skins, mulligans	ome, please list whethe company is different. 5, putting, tiger IN ADV	r you want Skins, Mulligans, Tiger, Put ANCE IF YOU WANT IT, SO we need to	ting (12 or 24
-	foursome by the deadline. It's easier for your company if you GOLF, BOX LUNCH & DINNER			ecessary. Thanks for your assistance.	
-	L EVENTS LISTED (1-4) below are OPTIONAL, I			ar, all of the following contest	ts MUST E
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2)	MULLIGANS @ \$25 PER FOURSOME			\$	
3)	TIGER HOLE @ \$20 PER FOURSOME			\$	
	(Tiger Hole– pay \$20 and your foursome	-		l.)	
4)	<u>10' PUTTING CONTEST</u> (One free putt w				
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	*** □ 12 @ \$10 <u>OR</u> □ 24 @ \$20	per foursome		\$	
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c) A'	TTENDANCE PRIZE DONATION	(optional) - **(CONTINUIN	G FOR 2023**	
Ma are as fourso gift ca	ny of our golfers prefer to do the prize don king for \$25 to be donated to the attendan ome's packet. It allows your foursome to ha rd. Your company name will be listed on the	ation this way (as we be ce prize fund. <i>EBMI sta</i> g ve a fun contest betwee at gift card and on donor	egan during covid ff will purchase g n your group on t s listing at dinner	I), so we are keeping this fo ift cards to put one prize in the course and winner receiver.	EACH
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PLEA	SE CHECK ONE: CHECK WILL BE M			CARD OR AMERICAN EXPRE	SS
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		F.		•	
NAM	ME (PLEASE PRINT OR TYPE)	CO	MPANY		

EMAIL ADDRESS

PHONE



GOLFfest September 18, 2023 At Crescent Farms Golf Course

Registration form included in this FLASH or Click on jotform link below,

https://form.jotform.com/71766087011152

We normally sell out this golf event!!!

SIGN UP TODAY

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For your credit card processing CONTACT: EBMI Office

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