

# Educational Seminars

The  
**Electrical  
Board** of Missouri  
and Illinois



**NEW  
LOCATION!**

**FREE  
PARKING!**

**St. Charles Convention Center  
St. Charles, Missouri**

**IAEI CODE CONFERENCE  
ARC FLASH PROTECTION  
GROUNDING  
ENERGY EFFICIENCY  
MOTOR MAINTENANCE  
SMART GRID  
ELECTRIC CHARGING  
STATIONS  
LED LIGHTING  
GENERATORS  
RENEWABLE ENERGY  
AND MORE...**

**Admittance to the EXPO is FREE! Fees are required to attend the seminars.**

**PDHs**

**PEUs**

## **SHOW HOURS**

**Tuesday, March 1**  
2:00 p.m. – 8:00 p.m.

**Wednesday, March 2**  
11:00 a.m. – 7:00 p.m.

MANAGED BY



SPONSORED BY



**SEMINAR 1** Ballroom A-B-C  
8:00 a.m. – 9:30 a.m.  
LU/PDH: 1.5 PEU: .75

**AMEREN'S SERVICE MANUAL • SAFETY AND RELIABILITY**

**1. Ameren's Service Manual**

Speakers: Steve Brophy, Ron Hefley, Jim Lewis, and Mike Tautphaeus, Ameren

Service Manual & Construction Practices

- Guidelines for attachment points
- Outlet/ meter locations in terms of access, clearance, and safety requirements
- Meter base clearances, bypass requirements
- Policy on contractor handling Ameren service conductors

**2. Safety and Reliability**

- "Cover-Up" – policy and practices to provide cover up on distribution lines and what level of protection is provided
- Reliability Inspection Programs – clearance requirements around URD equipment

Target Audience: Electrical Contractors, Design Engineers, and Electrical Suppliers

**SEMINAR 2** Ballroom D  
8:00 a.m. – 9:30 a.m.  
LU/PDH: 1.5 PEU: .75

**MOTOR MAINTENANCE • INFRARED THERMOGRAPHY**

**1. Motor Maintenance — How to Predict and Prevent Tomorrow's Motor Issues Today**

Speaker: Mike Adams, Zeller Technologies

Maintaining motor health seems to be a top priority to any production facility or commercial building. Losing a motor usually means losing production, comfort, and money. Motor issues can become a huge pain in the neck for facilities without a proper PM program. Learn about techniques that can be used to perform both state-of-the-art preventative and predictive maintenance to keep your facility running with minimal unexpected downtime and unnecessary stresses.

These techniques include but are not limited to:

- Advanced Motor Diagnostics
- Bore Alignment
- Dynamic Balancing
- Vibration Analysis
- Motor/Drive Analysis
- Ultrasound Analysis
- Laser Alignment
- Infrared Thermography

Learn about these processes and how to implement a PM program that fits your needs.

**2. Infrared Thermography: Predictive and Preventative Maintenance — "Know the Facts!"**

Speaker: David Ritter, Aschinger Electric Company

The use of Infrared Thermography (IR) for Predictive and Preventative Maintenance on Electrical Systems has become commonplace in many of today's industries. Unbeknownst to many facility managers and owners, there is a critically large gap in both the quality and safety of these services. Quality Equipment and Training is vital in providing a service that is both safe and valuable. Unfortunately, inadequate safety practices are often combined with poor service leading to a more dangerous workplace and inaccurate test results. We will have a brief introduction to Infrared Thermography, show actual problems found by our TEGG Service team. Explain the critical diagnostic services that should accompany any IR service. Show examples of false positive images. Explain the various safety precautions that need to be taken during the service. Explain what factors you should consider when choosing to perform Infrared Thermography.

Here is what the participants will learn:

- What is Infrared Thermography?
- What problems can an Infrared Service identify and not identify?
- What differentiates the various types of Infrared Service providers?
- Infrared is ENERGIZED Maintenance – What safety practices MUST be followed according to NFPA 70E and OSHA.
- How Infrared Thermography can decrease liabilities and increase profitability?

Target Audience: Facility Managers and Engineers, Building Owners and Property Managers

**SEMINAR 3** Ballroom A-B-C  
10:00 a.m. – 11:30 a.m.  
LU/PDH: 1.5 PEU: .75

**ARC FLASH PROTECTION ENHANCEMENTS AND MITIGATION**

Speaker: D. Edwin Scherry, P.E., Scherry Engineering

A reminder that an Arc Flash is a serious workplace hazard, which involves a Dangerous release of energy. Present some of the enhancements provided by NFPA-70E-2009 and proposed by IEEE-1584 Clause 4 – 2010. Assist in a better understanding of the evolution of analysis and mitigation of this hazardous condition.

What a participant will learn:

- Significant changes to the codes and standards that address arc flash assessment.
- Discuss some limitations of arc flash evaluation techniques.
- Demonstrate how protective device adjustments and distance can assist in reducing the arc flash hazard.
- Review mitigation approaches and Personal Protective Equipment (PPE).
- Present short videos that demonstrate incidents and some PPE.

Target Audience: Anyone involved with electrical power distribution at all voltages: engineers, electricians, contractors interfacing with electrical power (electrical and mechanical), electrical inspectors, electrical equipment representatives and manufacturers.

**SEMINAR 4** Ballroom D  
10:00 a.m. – 11:30 a.m.  
LU/PDH: 1.5 PEU: .75

**THE SMART GRID AT AMEREN CORPORATION**

Speaker: Mark Nealon, AmerenUE

"Smart Grid" is a relatively new term in industry. However, for over two decades, Ameren Corporation has invested in many of the technologies our industry considers "smart." For Ameren, making a grid "smarter" today involves deploying technology and intelligent devices across the electrical system to provide greater service reliability. It involves using advanced systems to increase operating efficiency and reduce losses, thus minimizing environmental impact. It involves providing timely information about energy usage to customers to help them better manage their costs.

The Department of Energy's vision of a "smart" or "intelligent" grid is one that will feature a robust, integrated network incorporating information and two-way communications technology into every aspect of electricity generation, delivery and consumption. This is a vision Ameren is working to make a reality, but its full realization will require significant investment given the massive scale of the undertaking. This presentation will explore the types of smart grid investments Ameren has made to date, the many new areas Ameren intends to explore, and the challenges facing the company as it works to prepare the grid for increased penetrations of renewable energy sources, distributed generation, and electric vehicles.

Target Audience: Engineers, planners, consultants, designers, contractors, and inspectors

**SEMINAR 5** Mtg. Room 101  
10:00 a.m. – noon (limited to 40)  
LU/PDH: 2 PEU: 1

**OR**

**SEMINAR 6** Mtg. Room 101 -  
1:00 p.m. – 3:00 p.m. (limited to 40)  
LU/PDH: 2 PEU: 1

**BUILDING INFORMATION MODELING (BIM), WHERE DO WE BEGIN?**

Speaker: Ken Schriever, Ross & Baruzzini Inc.  
Demonstrator: Nathan Haas, Ross & Baruzzini Inc.

Discusses BIM and the implementation of Revit. This was a very high level overview of the trials and tribulations, pros and cons, that Ross & Baruzzini faced during our Revit journey. Through the years we have refined our processes by streamlining the training and implementation.

Users will be advised on the following topics:

- What is BIM
- What is Revit
- Revit Pros & Cons
- Where are all the Revit Families
- Family Tips & Tricks
- How can Revit help your business
- Things to consider before diving into BIM
- Revit Training and Implementation
- Helpful Revit Resources

**INCLUDED IN ONE OR TWO DAY PASS COST ONLY IF YOU ARE REGISTERED FOR THIS SEMINAR IN ADVANCE... DUE TO LIMITED SEATING.**

**March 1st ONLY**  
From 2 – 6 PM

**ASK THE ELECTRICAL INSPECTORS**  
Table near registration area

Rick Hill, St. Louis County (2-4 pm)  
and  
Jerry Feagans, City of St. Louis (4-6 pm)

**Bring your CODE questions to us.**

**SEMINAR 7** Ballroom A-B-C  
12:00 noon – 2:00 p.m.  
LU/PDH: 2 PEU: 1

**GROUNDING OF ELECTRICAL SYSTEMS**

Speaker: Keith Cooper, McClure Engineering Associates

Grounding connections have been made over the last 78 years that are not in accordance with Code but have been tolerated because the loads were not sophisticated. The proliferation of micro-processors, computers and other electronics which have a low tolerance for poor grounding is forcing us to install the grounding systems properly. We will develop schematic connection diagrams for the grounding electrode conductor, the main bonding jumper and the equipment grounding conductors.

Here's what participants will learn:

- Understand how the system is grounded at the service entrance and at the separately derived system.
- Understand how the equipment is grounded at the service entrance, the separately derived systems and on the line side of the main services.
- Examine reasons for single point grounding.
- Identify the need for proper grounding.
- Examine the grounding peculiarities of emergency generator systems.
- Review the TIA/EIA Standard for Commercial Grounding and Bonding Requirements for Telecommunications.

Target Audience: Contractors, plant maintenance, electricians, design engineers and inspectors

**SEMINAR 8** Ballroom A-B-C  
3:00 p.m. – 5:00 p.m.  
LU/PDH: 2 PEU: 1

**GATEWAY TO ENERGY EFFICIENCY**  
*Ameren Energy Efficiency Opportunities*

Speakers: Cheryl Miller, Geoff Brigham and Bob Baumgartner – Ameren Illinois  
Pat Justis and Angela Pilant – Ameren Missouri

This presentation on energy efficiency will share how the benefits offered through Ameren's incentive programs have helped companies save **money** and **energy**. Ameren will present project case studies featuring energy efficient technologies implemented in a variety of business types including education, warehousing, office buildings, retail stores and data centers.

EE project case studies on: Lighting – (T12 lights, Sensors/Controls; Daylighting); Retro-Commissioning; VFDs; Geothermal; and EE technology used on new data center.

Target Audience: Contractors, engineers, facility managers, inspectors, electricians, plant maintenance

**SEMINAR 9** Ballroom D  
3:00 p.m. – 4:00 p.m.  
LU/PDH: 1 PEU: .5

**ELECTRIC VEHICLE CHARGING – WHAT DOES IT MEAN TO OUR INDUSTRY?**

Speaker: Mike Dixon – Product Line Manager of Emerging Markets and Technologies for Eaton Corporation

Electric Vehicles are becoming more and more accepted and available today and arguably will be an increasing part of our societal landscape for years to come. As this technology emerges, how do we answer the call for needed services and the support infrastructure it will require?

In this seminar, you will learn:

- NEC 625 and its application concerning Electric Vehicle Charging
- Infrastructure considerations for new and existing buildings
- Overview of Charging Stations and ways to manage them remotely
- Examples of existing installations and integrated solutions

Target Audience: Contractors, engineers, facility managers, inspectors, electricians, plant maintenance

**SEMINAR 10** Ballroom D  
4:30 p.m. – 5:30 p.m.  
LU/PDH: 1 PEU: .5

**LED LIGHTING: READY OR NOT**

Speaker: Steve Andert, William Tao & Associates

The use and availability of LED technology is growing rapidly in response to regulations and innovations. Yet, LED is often considered the wild west of the new lighting frontier. This program will provide an overview of the market trend and application of LED lighting as it relates to performance, selection, budget and Ownership. Learn to tell if LED is ready for you and whether you are ready for LED.

Target Audience: Engineers, facility managers, contractors, design professionals

**PEU CREDITS**  
These seminars have been designed to qualify for Professional Education Units (PEU) for Jefferson County.

**SEMINAR**  
**OSHA**  
Board Room 2nd floor  
9:00 a.m. – 3:30 p.m.  
Tuesday, March 1st\*  
9:00 a.m. – 2:00 p.m.  
Wednesday, March 2nd\*  
LU/PDH: 10 PEU: 4

**Please note that you must pay the OSHA fee, which is SEPARATE from a one or two-day pass. These passes DO NOT INCLUDE this 10 hour two-day session!!!**

**OSHA 10 HOUR CONSTRUCTION SAFETY & HEALTH TRAINING**

*(Limited to 20)*

**MUST ATTEND BOTH SESSIONS (10 HOURS) TO OBTAIN CERTIFICATE**

Speaker: Chris Burgoyne, OSHA Authorized Outreach Trainer

This class covers many common hazards in the construction industry. Students will leave the class with a working knowledge of the OSHA Act, selected 29 CFR 1926 subparts, and the organization of regulations. This material has been compiled in an easy to understand format and is taught by an OSHA authorized trainer.

\* A box lunch will be provided each day, as seminar continues through lunch.

**SEMINAR**  
**CODE**  
Ballroom A-B-C  
**IAEI St. Louis Chapter Meeting:** 7:45 a.m.  
**1st Session:** 8:00 a.m. – 11:30 a.m.  
LUNCH AND VIEW EXPO EXHIBITS  
**2nd Session:** 2:00 p.m. – 4:30 p.m.  
LU/PDH: 6  
PEU: 3

**Please note that you must pay the Code conference fee, which is SEPARATE from a one or two-day pass. These passes DO NOT INCLUDE this session!!!**

(You MUST attend **BOTH SESSIONS (all 6 hours)** to receive certificate. Certificates will be mailed about 6 weeks after the seminar to all those attending the full 6 hours. YOU must make sure that your badge is scanned before class, after each break or whenever scans are required. Certificates will not be given unless your badge is scanned each time, showing you attended the full 6 hours.)

**NATIONAL ELECTRICAL CODE CONFERENCE 2011 CODE CHANGES**

Speaker: Representative from IAEI international office.

Q & A Panel: Mike Burgess, Jefferson County Inspection  
Rick Hill, St. Louis County Inspection  
John Stacey, St. Louis City Inspection

The International Association of Electrical Inspectors-St. Louis Chapter Conference will include a narrated presentation of the 2011 National Electrical Code changes. This presentation will provide illustrations and explanations of changes in the National Electrical Code.

**This Code Conference will fulfill the City of St. Louis' license requirement for continuing education provided the licensee attends the full six hours of the Conference. You have to attend BOTH sessions and make sure your badge is scanned each time!**

The fee for the Code Conference is \$150 with registrations made before 2/14/11 and \$200 for registrations made after the February 14th deadline. This fee includes LUNCH and the book "Analysis of Changes, 2011 NEC" which each registrant will receive and can be picked up the morning of the conference. This analysis book covers almost 400 changes made in the 2011 NEC.

Here's what the participants will learn:

- Help you develop a better understanding of changes in the National Electrical Code.
- Broaden your knowledge of the N.E.C.
- Allow you to communicate with local authorities more effectively.

Target Audience: Contractors, electricians, engineers

**SEMINAR**  
**11**  
Ballroom D  
8:00 a.m. – 9:00 a.m.  
LU/PDH: 1 PEU: .5

**RENEWABLE ENERGY**

Speaker: Bill Barbieri, Manager of Renewables, AmerenUE

Renewable Energy Resource... Bill will provide an overview of various resources with the pros and cons of each. He will also update everyone on the federal and state legislative regulations.

Case Study: Tyson Research Center –  
Building and Operating a Net-Zero Energy Building  
Speaker: Kevin Smith, Washington University

The **Electrical Board** of Missouri and Illinois



SPONSORED BY  
**Ameren**

**NEW LOCATION!**

**St. Charles Convention Center  
St. Charles, Missouri**

**REGISTER ONLINE**  
[www.electricalboard.org](http://www.electricalboard.org)

**SEMINAR 12** Ballroom D  
9:30 a.m. – 12:00 noon  
LU/PDH: 2.5 PEU: 1.25

## GENERATORS

**SPEAKERS:** PANEL – Consisting of Generator Manufacturers and Ameren

Various generator manufacturers will discuss issues relative to factory and field acceptance testing, on-going preventative maintenance and the latest Tier rating levels. Reactive and resistive load bank testing will be reviewed and the parameters for pass/fail. Specific maintenance procedures will be outlined to help insure a reliable start and operation when an emergency power is required. You will learn the most common problems that cause generators to fail. Tier ratings will be defined and how different size generators and their application are affected. Additional topics will include paralleling of generators, outdoor sound attenuated enclosures and fuel tank design. Some of the major items to be reviewed are as follows:

- Types of load bank testing – Resistive and Reactive
- Outline of recommended factory versus field tests
- Acceptance criteria for load bank and other required tests
- What are the major items for maintenance? List of 8 major wear items including when (by engine hours and/or calendar days) that item should be inspected, replaced, and/or repaired.
- How the Tier ratings will affect future purchases and operation
- Major design elements to consider in outdoor sound rated enclosures
- At what kW value should generator paralleling be considered? Pros and Cons of Generator paralleling and what determines when paralleling is best for me?

**Target Audience:** Engineers, Designers, Facility Maintenance Staff and Contractors

**SEMINAR 13** Mtg. Room 101  
9:30 a.m. – 11:30 a.m.  
LU/PDH: 2 PEU: 1  
(limited to 40)

OR

**SEMINAR 14** Mtg. Room 101  
1:00 p.m. – 3:00 p.m.  
LU/PDH: 2 PEU: 1  
(limited to 40)

(Same information contained in each session.)

## ARC FLASH CALCULATION PROCESS AND PITFALLS

**INCLUDED IN ONE OR TWO DAY PASS COST ONLY IF REGISTERED FOR THIS SEMINAR IN ADVANCE... DUE TO LIMITED SEATING.**

**Speaker:** D. Edwin Scherry, P.E., President/Power Engineer, Scherry Engineering

Provide an understanding for design professionals who perform arc flash hazard calculations of the evolution of the analysis for this hazardous condition. A distinction needs to be understood as to how a bus is protected in limiting the arcing incident. The arcing fault current is different than the bolted fault current. Arc flash energy is a result of the arcing current, the time that the arc exists, and the distance from the arc, as well as maintenance of equipment. Arc flash hazard is not predictable and the calculations are educated approximations. Investigation of the available arc flash energy needs to be accomplished during design and not after the fact. More stringent design and specification of equipment is required.

What a participant will learn:

- What is involved in performing an Arc Flash Hazard Analysis?
- Briefly discuss how a protective device is sized to protect from an arc flash.
- Discuss some limitations of arc flash evaluation techniques.
- Demonstrate how protective device adjustments and distance can assist in reducing the arc flash hazard.
- What engineering techniques can be used to provide Mitigation of an arc flash?

**Target Audience:** Anyone involved with electrical power distribution design and evaluation at all voltages: engineers, other professionals interfacing with electrical power equipment interested in the process of evaluating distribution systems for arc flash hazards.

### PDH & LU CREDITS

These seminars have been designed to qualify for Professional Development Hours (PDH) for Professional Engineers and Learning Units (LU) for Architects.

**SEMINAR 15** Ballroom D  
1:30 p.m. – 2:30 p.m.  
LU/PDH: 1 PEU: .5

## ULTRASOUND TESTING SOFTSTARTS AND DRIVES

### Ultrasound testing

**Speaker:** Jim Sahrman. Guarantee Electrical Co.

Jim will use video presentations showing an electrician doing actual ultrasound testing at two customer locations. The advantage to the customer for this service is verifying the integrity of the high voltage terminations. If a problem is detected early enough, the down time and monetary value would be minor compared to a blow up. Although the repair work would certainly require a shutdown, this would be a controlled situation. Most of the time we do not detect any significant problems. We try to convince the customer to establish a good PM program. He will review several case studies that prove his point. A good PM program is the best insurance for minimum down time

### Softstarts and Drives — What's the Difference and When Should They Be Used?

**Speaker:** Jack Klaus, Zeller Technologies

Softstarts and drives are becoming necessary technologies to incorporate into motor systems. Both provide many benefits to both mechanical and electrical systems. Each have benefits that should be considered when applying these products to specific applications to maximize their effectiveness and capabilities. Learn about the differences between softstarts and variable speed drives and when each should be utilized. In today's environment energy efficiency, equipment reliability, and return on investment seem to be on everyone's mind. Found out how both softstarts and drives are being utilized today at companies in Missouri and Illinois. Many projects have allowed companies to enjoy benefits such as:

- Increased Production and Consistency
- Decreased Energy Costs
- Reduced Equipment Down Time
- Improved System Reliability
- Better Performance
- Improved Diagnostics
- Improved Automated Control
- Updated System to a Current Products
- Capital Budgeting Assistance through Utility and Government Incentive Programs

**Target Audience:** Contractors, maintenance, engineers, facility managers

**SEMINAR 16** Ballroom D  
3:00 p.m. – 4:00 p.m.  
LU/PDH: 1 PEU: .5

## INTRODUCTION TO LEED NC BUILDING COMMISSIONING

**Speaker:** Kevin S. Griesemer, G & W Engineering Corporation

Building Commissioning is quickly becoming the norm in the LEED process and understanding its purpose can be difficult to comprehend. Kevin will provide an overview of the LEED NC Building Commissioning process and purpose from project inception through project completion, especially how it relates to the electrical field. The overview will include project examples to highlight real life practices.

Participants will learn:

- What Building Commissioning is
- Commissioning benefits
- The commissioning process
- Commissioning for LEED New Construction Projects

# ATTENTION: REGISTRATION OPTIONS BELOW

## Advanced Rates – ALL seminar registrations MUST BE POSTMARKED BY February 14th!

ALL PRE-REGISTRATION ENDS ON FEBRUARY 21ST! After this date, you MUST register at Expo. EBMI will NOT accept pre-registrations after this date! (EBMI is at the Convention Center the week of the Expo and will not receive fax or mail during this time.)



### 1 FASTEST: Pre-register **ON-LINE** (for Expo and/or seminars)

Go to: [www.electricalboard.org](http://www.electricalboard.org), UNDER Electrical Expo 2011, click on Expo registration to register for Expo and seminars.

NOTE: On-line seminar fees MUST BE PAID by Mastercard, American Express or Visa.



### 2 Pre-register for **EXPO ONLY** by mail or fax:

Complete Part A&B on registration form and mail or fax (636/305-6430) to EBMI Office before February 14th.



### 3 Pre-register for **SEMINARS BY MAIL:**

Complete Parts A, B & C on registration form, along with checking off seminars you plan to attend.

Mail with check to: EBMI • 900 S. Highway Drive, Ste. 306 • Fenton, MO 63026

**before February 14th to receive advanced rates.**

Make checks payable to EBMI or The Electrical Board of Missouri and Illinois.

We also accept Mastercard, American Express or Visa by phone.

## Frequently Asked Questions to help guide you through pre-registration

- 1) **Can we complete registrations over the phone?** *No registrations will be taken over the phone!!* You must go online or complete registration form and fax/mail it to EBMI office (address shown above) prior to pre-registration deadline.
- 2) **Do I need a separate form for each individual?** Yes, we must have the registration completed for each individual so all information for badges are correct for those attendees. However, feel free to make copies of this form when needed. Please make sure to complete all areas of the form as we need this for badges. Reminder: **check job category & company segment** as this is REQUIRED for badges. NOTE: Badges are used for entrance into show at no cost. For seminars, badges AND ticket are required and will be SCANNED to allow entrance into seminar. Seminar costs must be paid in advance of the seminars.
- 3) **Can I make ONE check for multiple registrations?** Yes, but please include each completed registration form with this one check. Please make checks payable to EBMI and mail to address in box 3 above.
- 4) **Can I fax over registration form and then pay by credit card?** Yes, we will accept seminar registration forms faxed, but we ask that you call us with your credit card information once it is faxed to our office and to confirm its receipt in office.
- 5) **Is this registration form the same as the “Expo ticket” I received from area distributor?** Yes. If you ONLY plan to attend the Expo, you can complete a ticket OR Parts A & B of registration form—they are both the same.
- 6) **If I am attending seminars, along with attending Expo, what is needed?** Part A, B & C AND you need to check off the seminars you tentatively plan to attend at the bottom. This helps us in preparing handouts and ensuring enough seats for the seminar, as well as pdh/peu letters.
- 7) **When will we receive the badge and/or tickets?** Badge and/or seminar ticket (showing one day, two-day pass, OSHA or Code with your name on it) will be mailed to address YOU list on registration form ONE week prior to the Expo. Please list any necessary mail codes for companies or your home address if you prefer this to ensure delivery. For code conference attendees, certificates will be mailed to the address listed on this form, and mailed about six weeks after the conference.
- 8) **If attending the Code Conference, what information is needed?** Register early as we normally have over 450 attend this seminar. Code Conference is a separate fee and is NOT included in 1-day or 2-day pass fees. You must attend BOTH sessions and have your badge scanned EACH time there is a break. In addition, you may need to sign in at various times at the seminar to receive a certificate. NO certificates are given at the Seminar and will be mailed to address YOU list on registration form about six weeks after the Conference. If you don't receive a certificate by **end of April**, please call EBMI office. BUT REMEMBER... you must attend ALL six hours and we verify this with all of our scans!!
- 9) **When are pdh (engineers)/peu (Jefferson County requirements)/lu (architects) letters given out at the Expo?** We will have volunteers in back of room who will hand these out **AFTER** each seminar. **You must stay for the entire seminar to receive this information. We can only issue them at each seminar (not later via phone), so it's YOUR responsibility to make sure you receive these after EACH seminar! They will not be mailed later.**
- 10) **Who do I call with any additional questions?** EBMI Office – 636/305-6434!

**NO PHONE REGISTRATIONS ACCEPTED**

# EXPO PRE-REGISTRATION FORM

Please read ALL information regarding Expo registration on reverse side FIRST to answer many of your questions!

**SAVE \$50 BY REGISTERING BEFORE FEBRUARY 14!**

**ALL PRE-REGISTRATION ENDS ON FEBRUARY 21!**

**FASTEST way to register:** Online at [www.electricalboard.org](http://www.electricalboard.org) – You must pay for seminars by Visa, Mastercard or American Express online! If paying by check, please see options below. **No cost for registering for Expo only!** Any questions regarding registration, please call EBMI at 636/305-6434.

**Options if faxing (636/305-6434) or mailing (EBMI, 900 S. Highway Dr.-Ste. 306, Fenton, MO 63026) in registration:**

Must have a completed registration form for EACH attendee. Payment MUST be received with registrations or call in with your credit card information. If sending registration form in with your check, made payable to EBMI, please forward to address above. After February 21st, do NOT fax or mail any correspondence to EBMI as it will NOT be processed. You must register at the Expo after this date.

- 1 **Attending Expo ONLY** – You must complete sections A & B below. (Expo attendance is FREE and the badge allows admittance into Expo)
- 2 **Attending Expo AND Seminars** – You must complete sections A, B & C **and** check seminars attending. Then mail this form with your payment or call EBMI, 636/305-6434 with credit card payment. (Badge allows attendance into Expo. A ticket will be required for access into any of the seminars.)

**PART A** (Please TYPE OR PRINT CLEARLY all information. Badge (for Expo) and/or seminar tickets will be mailed to address listed below (home or work as specified by you below) ONE-TWO weeks prior to Expo.)

Name \_\_\_\_\_ Title: \_\_\_\_\_  
 Company \_\_\_\_\_ Mail Code/Unit: \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone ( \_\_\_\_\_ ) \_\_\_\_\_ Fax( \_\_\_\_\_ ) \_\_\_\_\_ e-mail \_\_\_\_\_

EBMI can use e-mail or fax to contact me regarding educational opportunities and future Expos.

**PART B** MUST CHECK ONE IN SECTIONS 1 AND 2 BELOW! THESE MUST BE INCLUDED TO RECEIVE A BADGE IN ADVANCE!

1  **only ONE in YOUR JOB CATEGORY**

AND

2  **only ONE describing your COMPANY SEGMENT**

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> 01 Architect        | <input type="checkbox"/> 08 Maint/Technician | <input type="checkbox"/> A Architect            | <input type="checkbox"/> H HVAC               |
| <input type="checkbox"/> 02 Cust. Serv./Adm. | <input type="checkbox"/> 09 Management       | <input type="checkbox"/> B Contractor           | <input type="checkbox"/> I Industrial         |
| <input type="checkbox"/> 03 Designer/CADD    | <input type="checkbox"/> 10 Purchasing       | <input type="checkbox"/> C Consulting Engineers | <input type="checkbox"/> J Institution        |
| <input type="checkbox"/> 04 Electrician      | <input type="checkbox"/> 11 Project Mgr.     | <input type="checkbox"/> D Distributor          | <input type="checkbox"/> K Manufacturing      |
| <input type="checkbox"/> 05 Engineer         | <input type="checkbox"/> 12 Sales            | <input type="checkbox"/> E Education            | <input type="checkbox"/> L Telecommunications |
| <input type="checkbox"/> 06 Estimator        | <input type="checkbox"/> 13 Student          | <input type="checkbox"/> F Government           | <input type="checkbox"/> M Utility            |
| <input type="checkbox"/> 07 Inspector        | <input type="checkbox"/> 14 Other: _____     | <input type="checkbox"/> G Health Care          | <input type="checkbox"/> N Other: _____       |

**PART C** REMINDER – PRE-REGISTRATION ENDS 2/21/11!!!!

SEMINAR	TIMES	BEFORE 2/14/11	AFTER 2/14/11
<input type="checkbox"/> 1840 <b>OSHA SAFETY</b> – 3/1/11 & 3/2/11 Must attend all 10 hours-BOTH DAYS!	9:00am-3:30pm 9:00am-2:00pm	\$140	\$190 \$ _____
<input type="checkbox"/> 1841 <b>IAEI Code Conference</b> - 3/2/11 Must attend both sessions – all 6 hours!	8:00am-11:30am 2:00pm-4:30pm	\$150	\$200 \$ _____

**Please note: CODE CONFERENCE & OSHA FEES ARE NOT INCLUDED IN 1 DAY OR 2 DAY PASS!!**

**\*BEST VALUE (Per Person Rates)**

<b>TWO-DAY PASS</b> – 3/1 & 3/2 Sem. #1-16 only! Code & OSHA are NOT included! Please <input checked="" type="checkbox"/> the seminars below that you plan to attend.	\$125	\$175	\$ _____
<b>ONE-DAY PASS</b> – 3/1: Sem. #1-10 OR 3/2: Sem. #11-16 MUST CHECK DATE BELOW! Code & OSHA are NOT included! Please <input checked="" type="checkbox"/> the seminars below that you plan to attend.	\$100	\$150	\$ _____

<input type="checkbox"/> Tuesday – March 1st	<input type="checkbox"/> Wednesday – March 2nd
<input type="checkbox"/> 1822 Sem. 1 Ameren's Service Manual 8:00-9:30 am	<input type="checkbox"/> 1832 Sem. 11 Renewable Energy 8:00-9:00 am
<input type="checkbox"/> 1823 Sem. 2 Motor Maintenance 8:00-9:30 am	<input type="checkbox"/> 1833 Sem. 12 Generators 9:30-12:00 noon
<input type="checkbox"/> 1824 Sem. 3 Arc Flash Protection 10:00-11:30 am	<input type="checkbox"/> 1834 Sem. 13 Arc Flash Calculations ** 9:30-11:30 am
<input type="checkbox"/> 1825 Sem. 4 Smart Grid 10:00-11:30 am	<input type="checkbox"/> 1835 Sem. 14 Arc Flash Calculations ** 1:00-3:00 pm
<input type="checkbox"/> 1826 Sem. 5 BIM / Revit ** 10:00-12:00 noon	<input type="checkbox"/> 1836 Sem. 15 Soft starts vs Drives 1:30-2:30 pm
<input type="checkbox"/> 1827 Sem. 6 BIM / Revit ** 1:00-3:00 pm	<input type="checkbox"/> 1837 Sem. 16 LEED Commissioning 3:00-4:00 pm
<input type="checkbox"/> 1828 Sem. 7 Grounding 12:00-2:00 pm	
<input type="checkbox"/> 1829 Sem. 8 Gateway to Energy Efficiency 3:00-5:00 pm	** two time slots for same presentation
<input type="checkbox"/> 1830 Sem. 9 Electric Charging Stations 3:00-4:00 pm	<b>Full description of each seminar available at</b>
<input type="checkbox"/> 1831 Sem. 10 LED Lighting 4:30-5:30 pm	<b><a href="http://www.electricalboard.org">www.electricalboard.org</a></b>

**PLEASE CHECK CHOICE OF PAYMENT:**

- Check (payable to EBMI)
- Credit Card (M/C, AmEx or Visa) please CALL EBMI office: 636/305-6434

**TOTAL DUE \$ \_\_\_\_\_**

**FREE PARKING!**

# FREE SHUTTLE SERVICE from the Family Arena



**FREE PARKING** The St. Charles Convention Center has free parking on lots in back of the facility. There are also two commuter lots in the front of building near I-70. See map for available parking lots. We feel that early morning visitors will find parking spaces but as the Expo opens there may be need for people to use the FREE Shuttle Service from Family Arena. There are directional signs along S. Fifth St./ Arena Parkway to help you get to the Family Arena. We will have shuttle pick-up signs in the parking lot.

**FREE Shuttle Service from the Family Arena.** This is less than 2 miles (or 5 minutes) from St. Charles Convention Center. The shuttle will be available on Tuesday, March 1st from 2:00 to 9:00 pm and on Wednesday, March 2nd from 9:00 am to 8:00 pm.

**Hotel Information** Go to our website to see a list of hotels around the St. Charles Convention Center. Be sure to mention the Electrical Board and Electrical Expo when making reservations.

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