Welcome

IEEE Electrical Safety Conference

Live Stream from Seattle Washington

Mike Brisbois | SeattleElectricalConference.com | 708.668.5488 | mike.brisbois@ieee.org

Agenda

Speaker Line up

7:00 am PST IEEE Announcements
7:02 am PST Conrad Lee, former Bellevue Mayor, Welcome
7:05 am PST Marcin Ruta, Electrical Safety
7:30 am PST Curtis Ashton, Electrical Safety regarding renewables Photovoltaics
7:55 am PST Earl McDonald, Electrical Safety
8:20 am PST Martin Perrone, Arc Flash
8:45 am PST Mike Brisbois, Arc Flash Incident Energy Calculations IEEE 1584
9:10 am PST David Lewis, Grounding and Safety Calculations
9:35 am PST Scott Francis, PPE Fabrics update

LLUNCH BREAK

11:00 am PST Special Guest Prize Pack Give Away
11:05 am PST Mike Doherty, Human Performance Best Practices Electrical Safety in the Workplace an Overview
11:30 am PST Kyle Krueger, Codes and Standards
11:55 am PST Michael Johnston, Codes and Standards
12:20 pm PST Doug Millner, Capacitor banks and discharge resistors
12:45 pm PST Salute to our Speakers

7:02 am PST Conrad Lee, former Bellevue Mayor

Welcome!

Bio

Conrad Lee is Former Mayor/City Councilmember of Bellevue, Washington. He is one of the most prominent and respected Asian American elected officials in the state. He is the longest serving councilmember of the city.

https://www.linkedin.com/in/conrad-lee-650169b/

7:05 am PST Marcin Ruta, Arc Flash DC Systems

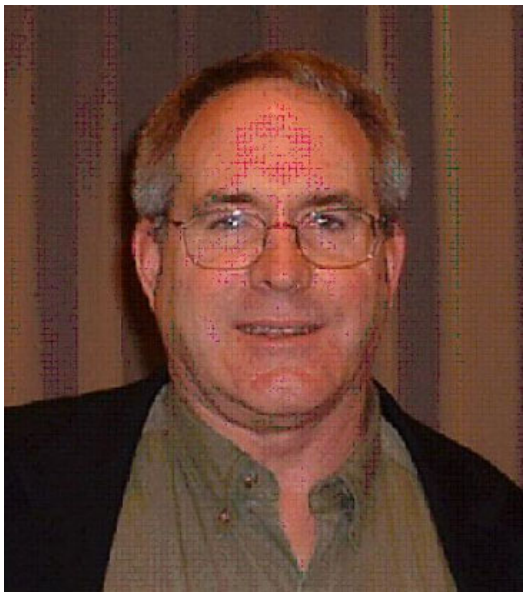
Arc Flash in DC systems – hazard overview with example of small BESS and proposed mitigation solutions. Conclusions about typical issues I see when it comes to shock and arc flash hazard in EU.

Bio

MSc Eng Marcin Ruta - in electrical engineering industry since 2007. I'm helping people with power system studies mainly focused on Arc Flash Risk Assessments in EMEA. Creating safety awareness in electrical trade, especially around arc flash and shock hazard.

https://www.linkedin.com/in/mrarcflash/

7:55 am PST Earl McDonald, Electrical Safety



Bio

Earl MacDonald, EE, MBA, PE is a Professional Engineer with background in Electrical Engineering Safety.

As an Electrical Engineering manager who has experience as a Technical Lead, Program Manager, General Manager and President / CEO

- Provide Cost and status of budget and schedule for management.
- Build and track program personnel and program performance against the integrated master schedule.
- Design and managing all aspects of military and commercial power systems and related controls for Protection Device Coordination, Controls, PLCs, generators, and the distribution systems.

Degrees are in Electrical Engineering (BS & MS) and an MBA plus am a Professional Electrical Engineer.

Am an excellent candidate for this position based on my Engineering and Management assignments which demonstrated my ability to quickly bring teamwork and affordability improvements to an organization. I have a proven history of successfully leading challenging technical programs. I utilize a data-driven management approach to plan, monitor and control execution, and to provide metrics-based communication to program stakeholders. I have experience in Lean and Continuous Process Improvement techniques.

My proudest accomplishment is creating and running a plastics company as a CEO, general Manager, Sales and marketing and Engineering Expert. I did the company financials and grew the company about 500%.

https://www.linkedin.com/in/earl-macdonald-5852122b/

8:20 am PST Martin Perrone, Arc Flash Electrical Safety

President of Everything Arc Flash.

Safety First! That is what motivates me to consult with prospects and clients to provide innovative solutions on the following topics: Ensure their buildings are safe from impending electrical failures. Make sure their building is Arc Flash Compliant. Help them avoid huge fines from OSHA for ignoring required annual electrical inspections and periodic preventive maintenance. Educate them regarding the true definition and process for hiring a qualified electrical contractor. And provide a comprehensive process to help them protect their assets and limit their liability when it comes to hiring an electrician.

As the Testing Representative and the Director of Electrical Safety and Code Compliance for the Testing Division at Carpenter Electric I work with local healthcare administrators, chief engineers and facility managers in hospitals, ambulatory health care centers, surgical centers, medical and dental offices, nursing homes and limited care facilities from Miami-Dade to Orlando Florida to keep their Critical electrical NFPA 99 compliant.

After healthcare, our secondary markets consist of water treatment plants & industrial manufacturing plants, and our tertiary targets are commercial property management companies and condominiums, all of which have one thing in common; the last thing they can afford is to experience an unscheduled power outage.

Our services include, but are not limited to: Energized Electrical Inspections via Ultrasonic Testing, Infrared Thermographic Testing, and building a baseline of their EDS via a TRUE RMS digital multi-Meter. In addition, we conduct Partial Discharge testing on Medium voltage electrical equipment, Generator Sales, Installations, and Maintenance Agreements. EV (Electric Vehicle Charging Sales, Installations, and Servicing. LED Lighting retrofit Sales and Installations. Lightning Protection Sales, Installations, and Repairs. De-Energized Testing, Cleaning, and Torqueing of electrical equipment. As well as Emergency Electrical repair service 24/7/365.

https://www.linkedin.com/in/martin-perrone-3052731b/

8:45 am PST Mike Brisbois, Arc Flash Incident Energy Calculations IEEE 1584

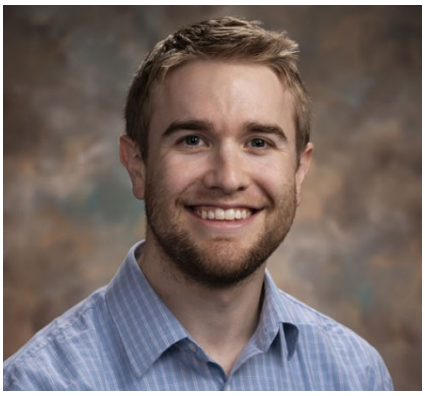
Incident Energy Calculations IEEE-1584

Bio

Mr. Brisbois is an Electrical Engineer with design experience, project management and leadership skills. He has worked in the building, space and technology sectors. He has hosted and presented at many technical sessions and conferences. He is a technical competent leader and able to get things done. Mr. Brisbois has his Professional Engineering license in the State of Washington, Oregon, Texas, Illinois, California, and Missouri. His focus is on leading sustainable energy projects. He is a board member on several technical organizations.

https://www.linkedin.com/in/mike-brisbois-pe-2b79207/

9:10 am PST David Lewis, Grounding and Safety Calculations



This presentation, given by David Lewis P.E. at EasyPower, provides a basic introduction to grounding safety calculations that are generally performed for medium and high voltage AC power stations or similar facilities. The concepts, data requirements, and analysis process will be discussed with reference to meeting safety criteria of IEEE Std 80. Understanding the concepts and methodology allows engineered solutions to reduce touch and step voltage hazards for personnel and the public.

Bio

David Lewis P.E. is a Grounding and Power Systems Engineer focusing on electrical studies for power transmission and distribution system analysis. He has experience in various infrastructure studies including substation and facility grounding studies, Arc Flash analysis, and AC electromagnetic interference studies for systems up to 345 kV. His experience with the simulation and measurements for various power system studies supports the development of EasyPower and XGSLab commercial software solutions. David graduated with a B.S. in Electrical Engineering from the University of Portland in 2011 and is an active member of IEEE and AMPP.

https://www.linkedin.com/in/david-lewis-45854121/

9:35 am PST Scott Francis, Comfort, Sustainability and Trust: Key Drivers of new FR, Arc Rated Fabric Technology

Comfort is king! Comfortable FR/AR clothing helps obtain “buy in” from your organization’s electrical workers so they will sustain the best practice for wearing FR/AR clothing throughout the workday. Sustainability is key in the utility and industrial space as many companies are striving to strengthen their environmental responsibility. Safety professionals/Electrical Safety Engineers: Where do sustainable opportunities fit into PPE selection? Do you trust that the latest FR, arc rated PPE/clothing in your PPE program has both a durable and sustainable impact that’s required in today’s environmentally-friendly world? Fortunately, durability and sustainability are related—you could even say that durability is at the heart of sustainability. Interestingly enough, the French word for sustainability is durabilité. A durable product won't be discarded quickly, which keeps it out of the landfill. FR fabric durability, garment durability and FR fabric production technology are all factors that can improve sustainability.

PPE - FR, arc rated clothing is all about trust. Do you trust that the FR, arc rated clothing has durable flame resistance and will perform at the moment of truth—an arc flash incident – and help protect against burn injury? Are you sure that your electrical worker will sustain the best practice for wearing FR/AR clothing throughout the workday? Can you bet on the fact that your fabric manufacturer uses the latest technology in sustainable processes to reduce emissions/environmental concerns in the production of the latest durable, comfortable FR/AR fabrics?

Learn about fabric/fiber selection, fabric finishing and manufacturing processes that produce comfortable FR/AR fabric blends and contribute to meeting sustainability goals such as Net Zero SBTi (science-based target initiatives) in FR/AR fabric manufacturing that in turn help your organization’s sustainability efforts!

Bio

Scott Francis, Technical Sales Manager, Westex: A Milliken Brand

Scott graduated from Augustana College and the University of Iowa with a M.S. in Inorganic Chemistry. Scott has been involved with the Safety Industry since 1991 and has extensive experience with protective apparel fabrics, PPE and knowledge of thermal hazard related NFPA standards and OSHA regulations. Scott frequently addresses trade associations and companies regarding electric arc, flash fire, combustible dust hazards, body burn injury, the protective performance of flame-resistant clothing, PPE best practices and related topics. On a personal note, Scott loves football and sometimes loves golf. He lives with his wife and two sons in the Chicago area.

https://www.linkedin.com/in/scottfrancisfr/

LUNCH BREAK

11:00 am PST Special Guest Prize Pack Give Away

11:05 am PST Mike Doherty, Title: Human Performance Best Practices - Electrical Safety in the Workplace – An Overview

An overview of the history and why Human Performance is the a critical factor in electrical safety improvement.

Bio

48 year's industrial / electrical utility experience as a scientific engineering technician, industrial instrumentation technician, licensed electrician, training professional and safety consultant. President of Blue Arc Electrical Safety Technologies Inc. since 2002. Electrical safety consulting, auditing, management, training and speaking. Senior Member of the Institute of Electrical & Electronics Engineers (IEEE). IEEE Petroleum & Chemical Industry Committee (PCIC) Emeritus. Chairperson of CSA Z462 Technical Committee since inception in 2006 for 12 years until December 2018 through first four editions and continues to serve. Past Technical Committee Chair of CAN/ULC S-801 - Electric Utility Workplace Electrical Safety for Generation, Transmission and Distribution. Past NFPA 70E Technical Committee Member for 12 years. 2013 recipient IEEE IAS Petroleum and Chemical Industry Committee (PCIC) Electrical Safety Excellence Award in Chicago, IL. 2017 Technical Presentation Award – Best of Electrical Safety at NETA PowerTest Conference in Anaheim, California. 2019 IEEE Electrical Safety Workshops Outstanding Service Award in Jacksonville Florida. Recognizes an individual who has demonstrated outstanding administrative leadership and contributions in support of the Electrical Safety Committee, including activities of any of its subcommittees.

https://www.linkedin.com/in/mike-d-bb35811a9/

11:30 am PST Kyle Krueger, Codes and Standards

Bio

Kyle Krueger, CESCP, Director, Codes and Standards
NECA Director, Codes and Standards
NECA Asst. Secretary, Codes and Standards Committee

https://www.linkedin.com/in/kyle-krueger-cescp-46125074/

11:55 am PST Michael Johnston, Codes and Standards

Bio

Executive Director of Codes and Standards at National Electrical Contractors Association (NECA)

https://www.linkedin.com/in/michaeljohnston4/

12:20 pm PST Doug Millner, Capacitor banks and discharge resistors

A short presentation on the importance of capacitor bank discharge resistors, recommendations made by various standards and codes, and simulations showing the potential impacts to the grid if the capacitors are not drained.

Bio

Doug Millner has 15 years of experience performing electrical design, transmission planning, power system studies, protective relaying, and NERC compliance for consulting companies and utilities. He has a bachelors and Masters degrees in electrical engineering from University of Minnesota – Twin Cities and Michigan Technological University. He currently works at the engineering firm he founded, NERX Power Consultants LLC.

https://www.linkedin.com/in/doug-millner-26607a184/

See you at our IEEE Las Vegas Tech Conference and Expo

April 21, 2023

12:45 pm PST Salute to our Speakers

We thank our sponsors:

Dennis Garrett, Blue Lake Energy
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Lanny Ray, SET Siemens
Akshay Prabhu, P2S

Thank You!

Mike Brisbois | SeattleElectricalConference.com | 708.668.5488 | mike.brisbois@ieee.org