ARC FLASH COMPLIANCE CONFERENCE

We need to get it right!

Featuring Keynote Speakers:

TERRY BECKER
P.Eng., CESCP, IEEE Senior Member
Certified Electrical Safety Compliance Professional (CESCP)
President & CEO, ESPS Electrical Safety Program Solutions Inc.

JIM POLLARD
Arc Flash Expert, Arc-Rated PPE, Unlimited PPE Inc.
Canadian Regional Representative, Oberon

25th & 26th April 2017

Four Points by Sheraton Toronto Airport
Mississauga, Ontario CANADA

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WHAT YOU WILL GAIN FROM THIS CONFERENCE:

- Status of provincial, territorial and federal OH&S regulations in Canada
- Understand how to achieve a compliant and electrically safe workplace
- Learn about electrical incident statistics and the value of this information
- CSA Z462, 2015 Edition requirements, and specifically Clause 4.1.5 Risk Assessment Procedure
- How to identify arc flash and shock hazards and the potential injuries that can result
- Understand what "working on" energized electrical equipment means and when an arcing fault probability exists
- Learn what an Electrical Safety Program is and why it is important
- The CSA Z1000 Hierarchy of Controls: Plan, Do, Check, Act!
- Lockout and tag out procedures and the CSA Z460 Standard
- Knowledge of the IEEE 1584 Standard and arc flash incident energy analysis and equipment labelling
- The status of CSA Z463 Guideline on maintenance of electrical systems
- Electrical equipment maintenance requirements with a focus on safety, then reliability
- Specific predictive maintenance testing
- Case histories of company's implementation of the requirements of the CSA Z462 Standard
- New technologies in PPE, tools and equipment

WHO SHOULD ATTEND:

- Electricians
- Electrical Engineers
- Electrical Technologists
- Electrical Engineering Managers
- Power Line Technicians
- Power System Electricians
- Instrumentation Mechanics
- HVAC Technicians
- Elevator Mechanics
- Cathodic Protection Technicians
- Engineers and Managers
- Training Manager or Coordinators
- Supervisors
- Operations Managers
- Power Plant Operators (coal, natural gas, nuclear, hydro, wind and solar)
- Maintenance Managers
- Government OH&S Managers & Inspectors
- OH&S Managers
- OH&S Professionals
- OH&S Risk Assessment Analysts
- Process Safety & Loss Prevention

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INTRODUCTION TO THE ARC FLASH COMPLIANCE CONFERENCE

This conference will be a Canadian conference, all presenters or tutorial instructors will be Canadians involved in electrical safety.

Attendees will receive clarity on questions and concerns they may have with respect to the practical and appropriate application of the CSA Z462 Workplace electrical safety Standard and its application across Canada and in all industry sectors as due diligence to OH&S regulations (e.g. Provincial, Territorial, or Federal Canada Labour Code Part II).

You will also have the opportunity to expand your network and interact with others in industry to learn more about arc flash and shock hazards and how to mitigate them or reduce risk to an acceptable level.

OUR CONFERENCE PRESENTERS:

TERRY BECKER

P.Eng., CESCP, IEEE Senior Member
Certified Electrical Safety Compliance Professional (CESCP)
President & CEO, ESPS Electrical Safety Program Solutions Inc.

Terry is the visionary, creator and subject matter expert of the unique processes, and systems established at ESPS to mitigate and reduce risk of exposure to all workers from arc flash and shock. ESPS delivers Electrical Safety Programs, Electrical Safety Audits and Qualified Electrical Worker Electrical Safety Competency Validation. ESPS also provides classroom based low and high voltage arc flash and shock training for Electrical Workers and Non-Electrical Workers.

JIM POLLARD

Arc Flash Expert, Arc-Rated PPE, Unlimited PPE Inc.
Canadian Regional Representative, Oberon

His goal is to save lives by helping Companies be compliant with Arc Flash and Electrical Safety. He believes every workplace electrical fatality was preventable. To accomplish this Jim Pollard created his company, Unlimited PPE Inc., to focus on providing specialized solutions for Arc Flash & Shock compliance. Unlimited PPE represents Oberon, ESPS Electrical Safety Program Solutions Inc. and PROXXI to create combined solutions compliant with all relevant acts, codes, regulations and applicable best practice Standards. As a Subject Matter Expert on Arc Flash personal protective equipment (PPE) Jim's experience and technical knowledge has been tapped by technical committees in Canada and the USA including CSA Z462, ASTM F18.15, CAN/ULC-S801, CSC/IEC/TC78 and ULC Live Working.

Sponsorship Opportunities

Representing your business at the Arc Flash Compliance Conference in 2017 will provide you the opportunity to reach key decision makers from a multitude of industries.

For more information on sponsorship and exhibition opportunities please contact Joseph Madeley via email conferences@idc-online.com

CONFERENCE DAY ONE – 25th April 2017

Canadian Breakfast – 7.00am

8.00am Registration

8.15am Opening Address

8.30am Session 1 KEY NOTE

CSA Z462 Getting it Right!

Terry Becker – President and CEO, ESPS Electrical Safety Program Solutions Inc.

In its 3rd Edition and on January 1, 2018 moving to its 4th Edition the CSA Z462 Workplace electrical safety Standard has saved workers lives!

In Canada and the Unites States the CSA Z462 and NFPA 70E Standards have been widely adopted by many industries. The latest 2015 Editions move the Standards to "risk based" and the context of how arc flash and shock hazards are identified and analyzed against energized electrical work tasks has changed. The new Risk Assessment Procedure is not understood and is misapplied. Issues continue with respect to arc flash incident energy analysis studies and applied equipment labels. There is a 40 cal/cm2 MYTH that is limiting the use of arc-rated PPE as a control. Arc flash PPE has been procured, but may not be worn at all by qualified electrical workers, has performance issues and may be worn when it is not necessary. Arc flash PPE technology has also evolved and safer PPE is available for qualified electrical workers and employers should be budgeting to upgrade. Training provided is only defined as "awareness" when it needs to be comprehensive, and should not be fear based training. Controversy exists on the physics behind an arcing fault and the resulting arc flash and the calculations methodologies, the IEEE 1584 Standard will be released in 2017 with updated formulas. The presentation will highlight these issues and stimulate an open discussion and dialogue. We need to "Get it Right!"

9.30am Session 2

How the Hierarchy of Implementation in CSA Z460 Control of Hazardous Energy – Lockout and Other Methods Can Contribute to Increase Safety and Save Lives

Jean Bruneau – Environmental Health and Safety Expert, CONFORMiT

In 2016, diligent and rigorous implementation of CSA Z460 Control of hazardous energy – lockout and other methods can contribute to increase safety. The main ways to achieve this goal is by eliminating the hazard through the design like the use of materials, process or substitution of equipment (ex.: engineered safeguard, controls, etc.), by the use of warning and alerting techniques like systems that increase awareness of hazards (ex.: signs, alarms, etc.); by the administrative controls such as specific and adapted training and lockout specific procedures, machine by machine instructions, etc.; and by the appropriated choices of personal protective equipments, including measures to ensure the selection, proper use and maintenance of them. Each element individually as the only available means of prevention is maybe a little weakest link but as a perfect selected chain links of measures adapted to the workplace reality can contribute to increase safety and save lives.

Morning Tea & Coffee Break – 10.15am

10.45am Session 3

Methods of Arc Flash Mitigation

Sergio Panetta – VP Engineering, I-Gard

This paper summarizes the methods of arc flash mitigation suggested in Annex O of NFPA 70E and Z462. These methods will be explored and the corresponding incident energy will be calculated using the formulas in IEEE 1584.

11.30am Session 4

The Role of Design, Commissioning & Maintenance in Incident Energy Reduction

Wheeler O'Harrow – Director of Engineering, Shermco Industries

The purpose of this paper is to outline a number of incident energy reduction techniques and the merits and shortfalls of each of the discussed alternatives with specific commissioning examples where possible. Discussion of the entire process of design, commissioning, and maintenance is examined with the intent to ensure an effective incident energy reduction technique. The absence of any of these steps in the incident energy reduction objective can create a misleading assessment of the particular hazard as well as the risk presented to personnel.

CONFERENCE DAY ONE CONT. – 25th April 2017

Lunch Break – 12.15pm

1.15pm Session 5

The Use of Current Limiting Fuses for the Mitigation of Arc Flash

Lew Silecky – Manager, Technical Services, North America, Mersen

The purpose of this paper is to educate and inform workers and those involved in the electrical industry to hazards associated with arc flash events and how to mitigate these events using current limiting fuses. There are still many questions being asked as to what types of fuses are best suited mitigation and reduction of incident energies. The focus will be on fuse performance under fault conditions and will show which current limiting fuse type is the best to use. The end result should lead to a more knowledgeable individual, which in turn will lead to a safer working condition, when working in and around live equipment.

2.00pm Session 6

Airborne / Structure Borne Ultrasound is Considered the New Kid on the Block When It Comes to Electrical Inspection

Sean Miller – Canadian Operations Manager, UE Systems

When apparatus such as switchgear, transformers, insulators or disconnects and splices fail, the results can be catastrophic. When left undetected, these conditions can become sources of an arc flash incident. Ultrasound inspection may be performed on both open access and enclosed electrical equipment at all voltages, to detect corona, tracking and arcing, which is why CSA Z463 "Guideline on maintenance of electrical systems" suggests the technology for online testing. This presentation will teach you how to detect and analyze corona, tracking and arcing, and explain how airborne ultrasound and infrared thermography compliment each other and take your electrical maintenance and reliability program to the next level.

Afternoon Tea & Coffee Break – 2.45pm

3.15pm Session 7

Risk Management, Risk Assessment and the Hierarchy of Risk Control

Daniel Roberts – Senior Manager, Electrical Safety Consulting, Schneider Electric

Risk management, risk assessment and the hierarchy of risk control, when implemented within an Occupational Health and Safety Management System (OHSMS), are an effective and sustainable approach to improve workplace electrical safety. What is an OHSMS? What is risk management, risk assessment and the hierarchy of risk control? How can they be applied in a practical way to electrical safety?

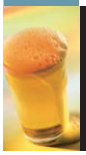
4.00pm Session 8

Electrical Maintenance and Incident Energy

Kerry Heid – A.sc.T., President & CEO, Shermco Industries

Many users of electrical power distribution have calculated the values of incident energy at numerous points in their systems through an arc flash hazard analysis. The process normally results in information such as a label indicating the incident energy in calories per square centimeter. In EVERY CASE, this energy value is 100% dependent on the clearing time of the upstream protection device and the energy calculations assume they are in good working order. However, many times these devices operate much slower (or not at all) when not properly maintained and consequentially when an arc flash event happens, it drastically increases the flash hazard above the calculated value. This presentation looks at the effect a lack of maintenance can have on actual versus calculated values of incident energy. The presentation will also cover the techniques utilized to establish an effective electrical maintenance program as per the new CSA Z463 Standard "Maintenance of Electrical Systems".

Conference Closing – 4.45pm



Networking Session – 4.45pm to 5.45pm

An hour dedicated for all attendees to meet and socialise with experts and industry peers at the Arc Flash Compliance Conference Cocktail Hour.

All conference papers are reviewed and selected for their high quality and technical value by our panel of specialists experienced in the theory and practice of arc flash.

CONFERENCE DAY TWO – 26th April 2017

8.30am Session 9 WORKSHOP

KEYNOTE MORNING WORKSHOP

Anatomy of Arc Flash & Shock PPE – PART 1

Jim Pollard – Arc Flash Expert, Arc-Rated PPE, Unlimited PPE Inc. and Oberon

This is an interactive session on Arc Flash PPE that peels back the layers to describe how the products are manufactured, tested, certified, selected, pre-use inspected and properly used. You will learn about the applicable Standards to make informed decisions about your Arc Flash PPE to improve worker safety and productivity. Prepare to experience first-hand the latest innovations in product development using actual samples of PPE both before and after an Arc Flash exposure. Practical examples will be used to demonstrate how this protection works and a clear explanation of what Arc Flash PPE pitfalls to avoid. Delegates will walk away with valuable knowledge and Electrical Safety Program resource tools that can be immediately applied at your workplace for compliance with the CSA Z462 Workplace Electrical Safety Standard. This workshop will include the following material: Arc Flash and Shock PPE Audit Tool; Electrical Specific PPE, Tools and Equipment Inventory Form; and Specification Tables.

Field Application of Energized Electrical Work Tasks – PART 2

Chris Page – Senior Project Manager, Electrical Safety Program Solutions (ESPS)

The application of an Electrical Safety Program and expectations of OH&S Regulations would require the NFPA 70E-2015 / CSA Z462-2015 Risk Assessment Procedure to be documented for a discrete energized electrical work task. This tutorial will review actual energized electrical work tasks as identified in CSA Z462 Table 4A. The Instructor will review how a Qualified Electrical Worker can work through identifying if they are exposed to arc flash and shock, assess risks and how to appropriately apply the Hierarchy of Controls (e.g. preventive and protective).

Includes Morning Tea & Coffee Break

Lunch – 12.30pm

1.30pm Session 10

Assessment of Employee Competence as a Way to Measure Training Effectiveness

Natasha Parfyonova – Senior Psychometrician, Yardstick Software

Organizations invest substantial resources into workplace safety training to ensure employee compliance with safety standards. One way to determine if employees mastered the required knowledge and skills is to assess their competence through an objective examination. Yardstick will discuss the process and benefits of developing an examination that is tied to a defensible job competency profile. This examination could be offered to employees upon completion of their safety training to promote workplace safety and save lives. A case study on the development of a certification exam for electrical engineering technologists will be presented as a possible model.

2.15pm Session 11

What is an Electrical Safety Program?

Terry Becker – President and CEO, ESPS Electrical Safety Program Solutions Inc.

What is an Electrical Safety Program? What should the "framework" or Table of Contents include for required documentation? What should the context of the Electrical Safety Program be e.g. hazard, work task, worker role? Should the information be presented in a certain order? How do I develop an Electrical Safety Program? Should we have an Electrical Safety Steering Committee in place? What is the new Risk Assessment Procedure? What worker role can actually perform energized electrical work? How do you implement the Electrical Safety Program? How do I control who gets training and the cost of training? Do I have to include the requirement for Electrical Safety Auditing? What about Emergency Response, Incident Reporting and Management of Change? Does my company have the right or appropriate information in the Electrical Safety Program we thought we had developed appropriately? In this presentation Terry will answer all of these questions.

Afternoon Tea & Coffee Break – 3.00pm

3.30pm Session 12

Expert Discussion Panel

This session will bring together all the conference speakers to share ideas and discussion on all things arc flash with the audience. Delegates will have the opportunity to ask questions and discuss arc flash related issues in their workplace, covering typical problems and possible solutions.

Conference Closing – 5.00pm

REGISTRATION FORM:

ARC FLASH COMPLIANCE CONFERENCE

25th & 26th April 2017

Four Points by Sheraton Toronto Airport, Mississauga, Ontario, Canada

Simply complete this form online or return by email to conferences@idc-online.com.

EARLY BIRD OFFER:
10% off the conference fee for registrations received on or before 28th March 2017
– SAVE $150.00

AND /OR

3 FOR 2 OFFER:
Register 3 delegates and only pay for 2
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2. HOW DID YOU HEAR ABOUT THIS EVENT?

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3. REGISTRATION & PAYMENT DETAILS

Prices shown are exclusive of GST or HST

PLEASE NOTE: Full payment is required prior to the commencement of the conference.

ARC FLASH COMPLIANCE CONFERENCE – 25TH & 26TH APRIL 2017

☐ OPTION 1: **Early Bird Discount – 10% OFF**
– Book **on or before** 28th March **(SAVE $150)** **$1350** x _____ delegates = $_____

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☐ OPTION 4: **3 for 2 Offer Standard Rate (NO Early Bird)**
– Book **after** 28th March **(SAVE $1500)** 3 delegates: 2 x $1500 = **$3000** = $_____

+ 5% GST (or 13% HST) = $_____

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GENERAL INFORMATION

Confirmation Details
A confirmation email and invoice will be sent to delegates within 3 days of receiving the registration.

Cancellation Policy
A fee of 20% cancellation will apply for cancellations received 7 – 14 days prior to the start date of the conference. Cancellations received less than 7 days prior to the start date of the conference are not refundable, however substitutes are welcome.

Venue
Four Points by Sheraton Toronto Airport
6257 Airport Rd
Mississauga, ON L4V 1E4
Phone: +1 905-678-1400

Accommodation
The conference venue has accommodation available. Contact directly on +1 905-678-1400 and mention the conference when booking to receive the special room rate of $149/night.

Food and Beverages
All lunches, morning and afternoon refreshments are included in the registration fee.

Unable to Attend
If you are unable to attend the full conference program, contact us for details to attend individual sessions, or to purchase the Conference Resource Kit.

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