

# TECHNICAL TRAINING DAY

Friday, November 15 iHotel & Conference Center 6500 67 Street | Red Deer, AB

**ECAA MEMBER \$185** 

**NON MEMBER \$225** 





ECAA | ecaa.ab.ca | 780.451.2412



## **GUEST SPEAKERS**



DARIN HUCUL, P.ENG PEC PMP

Chemco Engineering



**AD GROZDANIC** *Levven Electronics Ltd.* 



SANTOSH BASKARAN
Levven Electronics Ltd.



LARRY CANTELO, PEC



MELVIN NEWMAN

CEO
Patabid



JOEL FUNDYTUS

Electrical Industry Training

Centre



GORDON LLOYD

Collicutt Energy



JASON COURTEPATTE, PEC, SCO Tapitow Li Salay Ltd.



**PAUL CHANG**Alberta Municipal Affairs



ZIA ZAIDI, BE (ELECT), MS
Siemens Canada



### **AGENDA**

8:00 AM

Check - in Registration & Breakfast

8:30 AM - 10:00 AM

Generator Loading & Installation Practices - Gordon Lloyd

Energy Storage System Battery Installations
Larry Cantelo & Paul Chang

8:30 AM - 12:00 PM

Excel Intro - Melvin Newman

10:30 AM - 12:00 PM

Electrical Vehicle Charging Installations - Larry Cantelo

Compressed Air Long Duration Energy Storage - Jason Courtepatte

12:00 PM - 1:00 PM

LUNCH

1:00 PM - 2:30 PM

Wire-Free Controls: What's New & Why Now?

Ad Grozdanic & Santosh Baskaran

Solar Installation Practices & Inspection Details - Joel Fundytus

1:00 PM - 4:30 PM

Specification Documents - Melvin Newman

3:00 PM - 4:30 PM

CEC & Equipment Termination Temperature Calculations
Larry Cantelo

Series Rating Combination of Protective Devices
Darin Hucul & Zia Zaidi



GENERATOR LOADING & INSTALLATION PRACTICES Presenter: Gordon Lloyd, Collicut Energy

This session covers best practices in how generators systems can be loaded and how much loading is required. Installation practices will be covered.



ENERGY STORAGE SYSTEM BATTERY INSTALLATIONS Presenter: Larry Cantelo, PEC & Paul Chang



This session covers the Canadian Electrical Code and building construction requirements in applicable Codes. This ties in with how other codes relate to the Building Code. Application of the Safety Codes Act and regulations for alterations (construction requirements) is covered as well as Permit Regulation and applicable permits. How Safety Codes Officers (Electrical and/or Building) are involved in installation practices is also covered.



ELECTRICAL VEHICLE CHARGING INSTALLATIONS Presenter: Larry Cantelo, PEC

This session will delve into EV charging including a look at the three different charging levels. The CE code requirements for installation of EV supply equipment will also be covered.



SOLAR INSTALLATION PRACTICES AND INSPECTION DETAILS

Presenter: Joel Fundytus

This session will cover installation practices as they relate to the CEC and other requirement practices that electrician solar installers should know. How inspectors view installations will also be covered.



COMPRESSED AIR LONG DURATION
Presenter: Jason Courtepatte, PEC, SCO

This session will be on Compressed Air Energy Storage (CAES), an emerging technology that utilizes underground reservoirs and pipelines to store and release energy. Covered will be the fundamentals of CAES, its potential applications in renewable energy integration, and the technical considerations for installation and maintenance. Aimed at electrical contractors and inspectors, the session will provide a solid foundation for understanding this new technology and its impact on future energy systems.



WIRE-FREE CONTROLS: WHAT'S NEW & WHY NOW? Presenter: Ad Grozdanic & Santhosh Baskaran



This session will cover market trends, technology advancements, updated codes, and evolving business models for electrical service providers. It will explore wired vs wireless vs wire-free technology, radio frequency vs Wi-Fi and Bluetooth, and the impact of Matter. We'll also touch on code updates, builder/homeowner impacts, and cost comparisons for basic ON-OFF functionality. The session includes a hands-on demo of a wire-free multi-way switch setup, a stress test for reliability/security, and smart features like energy-saving automation and voice-assisted controls



SERIES RATING COMBINATION OF PROTECTIVE DEVISES
Presenter: Darin Hucul, P.ENG PEC & Zia Zaidi



This session will present an in-depth exploration of Series Rating Combinations of protective devices. It will provide comprehensive understanding of series rating combinations, including their applications, testing and certification, advantages and limitations. We will examine examples to illustrate how series-connected short circuit ratings are utilized to achieve optimal protection and coordination in electrical systems.



#### **EXCEL INTRO**

Presenter: Melvin Newman

This 3.5 hour course will introduce the basic functionality of Microsoft Excel and key applications for its use in the construction. Attendees will learn about the core functions in Excel that are used everyday. They will also learn about how to format Excel documents to generate reports for tracking, RFI's CCNs and other core construction functions. Basic charting functions (trending, tacking, etc.) will be covered allowing for more advances visual reports to be generated. Several key templates will be generated for the attendees to take away and use/develop themselves.

#### SPECIFICATION DOCUMENTS

Presenter: Melvin Newman

This 3.5 hour course will dive into the complexities of construction specification documents from small to large projects. Sample projects from the public sector will be sed to demonstrate real world situations. The construction specification is a legal document that the contactor is bound to deliver on. These are complex documents often with internal inconsistencies and issues. Using real world examples attendees will gain a deeper understanding of how the specification document is built along with strategies to identify issues ahead of time.

\*\*Devices are required for these sessions.