



Southern Alberta Section
IAS-PES Chapter



Getting on top of High Voltage Grounding

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Co-sponsored by AESO

Grounding in the context of high voltage facilities is one of the primary systems integral to the safe operation of the electrical system. Designing effective and economical ground grids requires a sound understanding of engineering principles, electrical circuits, field theory, ground testing, and good judgment. Grounding systems are everywhere and their interaction with each other is often overlooked or underestimated. This two-hour seminar will introduce some of the fundamental concepts of grounding in a high voltage context, and provide some practical approaches to solving grounding problems.

Outline:

- 1) Introduction
- 2) Basic concepts – Grounding Fundamentals
 - a) Where is the ground?
 - b) Types of Grounding
 - c) Economics and design
 - d) Finding the real problems
- 3) Testing Fundamentals
- 4) Standards and Guides
- 5) From the past to the future of grounding.

Location: Events Center C
(University of Calgary Downtown Campus)
906 - 8th Avenue SW, Calgary, Alberta

Date: Monday, September 26, 2016

Time: 6:15PM to 8:30PM (2 hours) All times are: Canada/Mountain

Agenda:

5:30pm:	Doors open
5:30pm-6:10pm	Networking and Light meal
6:15pm	Presentation of the PES Outstanding Engineer Award
6:30pm	Presentation

Register at: <https://meetings.vtools.ieee.org/m/37500> Advance registration closes September 21.

Speaker:



Carl Moller is a professional engineer with over 10 years' experience in design, testing, investigation and studies in high voltage grounding. Carl has developed a range of skills in addition to grounding such as protection and control, fault studies, substation design and lightning shielding. Carl has experience implementing high voltage grounding and design related projects in hydro, thermal, mining, SAGD facilities, urban transmission and distribution assets ranging from 600V to 500kV. Recently, Carl has been an active member and contributor on several related IEEE substation committee working groups which produce the following IEEE guides: 80, 81, 837 and 998. Carl has co-delivered an IEEE 81 grounding seminar after the latest publication of the guide. In addition, Carl has worked with another company to co-deliver grounding training and education in the US

and Australia. Presently Carl is the principal engineer at GroundCAN Ltd., a consulting company which specializes in engineering, testing, training and education.

Please contact Greg Schellenberg [Greg.Schellenberg@sandc.com] if you have any problems registering for the seminar, or if you have any questions.