

[www.ceati.com/meetings/gltf2010](http://www.ceati.com/meetings/gltf2010)

## Registrant Information

Name

Organization

Street Address

City, Province/State

Postal/Zip Code

E-mail

Phone

Fax

## Payment Options

- VISA
- MasterCard
- American Express



Card No.

Expiry Date  /  MM/YY

Signature

Cardholder

Return this form via fax to +1 (514) 904-5038 or call us at +1 (514) 866-5377

## Workshop Location:

The event will be held at the Holiday Inn Midtown hotel in downtown Montreal, Quebec. A group rate of \$122+tax per night is available with this hotel, and can be obtained by mentioning the "CEATI" room block upon reserving a room. Reservations may be made by calling 1-514-842-6111, 1-800-387-3042 or via email at [himidtown@rosdevhotels.com](mailto:himidtown@rosdevhotels.com). Airport Bus Shuttle is available, for more information, please call 1-514-631-1856

Located in eastern Canada, Montreal is the country's cultural capital and has a strong international influence. Come enjoy diverse cuisine, beautiful museums, exciting nightlife, and the hospitality of one of the country's oldest cities.



## Registration Fees

- FREE  GLTF Participants (Two per participant organization)
- FREE  Workshop Speakers
- \$545  CEATI Participant Organizations (Two per utility)
- \$795  Standard Registration
- \$1295  Exhibition Space (Includes one pass)
- \$545  Additional Exhibitor (One additional pass)

All prices subject to applicable taxes.

Sponsorship opportunities for exhibitors are also available. Please visit [www.ceati.com/meetings/gltf2010](http://www.ceati.com/meetings/gltf2010) or contact [workshops@ceati.com](mailto:workshops@ceati.com)

## Discounts

- Early bird discount of 5% for registrations received before May 14, 2010.

## Important Information

Registration fees include meals and breaks (where indicated on the schedule), evening reception and proceedings packages.

All prices are listed in Canadian Dollars (CAD). Charges will appear as "CEATI International Inc." Please note that CEATI cannot guarantee currency exchange rates for credit card transactions.

All cancellations received before August 1, 2010 are subject to a \$100 processing fee. There will be no refunds granted after this date.

Delegate substitution is permitted at no extra cost.

All workshop inquiries should be directed to [workshops@ceati.com](mailto:workshops@ceati.com). Please visit [www.ceati.com/meetings/gltf2010](http://www.ceati.com/meetings/gltf2010) for more information.

## Dietary Requirements

- Please check if you wish to be contacted about allergies or other dietary requirements

## Grounding and Lightning Systems

Effective grounding and lightning impact mitigation is a crucial aspect of a utility's effort in providing secure and reliable service to its customer base. Unfortunately, there are countless issues that can result from poor grounding, and the knowledge required to understand them is often difficult for new and seasoned engineers to acquire. The loss of expertise within each utility due to retirements exacerbates those difficulties, increasing the need for cross-disciplinary training and information transfer.

The Grounding and Lightning Workshop brings together industry experts providing an excellent opportunity for networking with consultants, manufacturers and representatives from various electric utilities. This workshop is a forum for the exchange of information related to grounding and lightning concerns, with a focus on technical presentations, training and the exchange of ideas and experiences for the benefit of the attendees.

The workshop will present an overview of grounding and lightning topics in a variety of presentations from leading industry professionals.

## Workshop Highlights

### Training Session

"The Optimum Protection of Power Systems with Arresters"

Jonathan Woodworth, ArresterWorks

### Manufacturer Experience

Hubbell Power Systems

Vaisala

### Grounding for Safety

Distribution Neutral Grounding Systems

Lightning Protection

Grounding System Testing and Maintenance

This workshop is organized with the support of the CEATI Grounding and Lightning Task Force.



## September 13, 2010

Chaired by John Williamson, GLTF Technical Advisor

7:30 - 8:30 Registration  
(Continental breakfast available in the exhibit hall)

8:30 - 8:40 Welcome Address  
TBA

### Session 1

8:40 - 9:00 Distribution Stray Voltage Mitigation (Tingle Voltage Demonstration Unit)  
\*Separate Lab Exercise Included  
Dale Williston, Williston & Associates

9:00 - 9:45 Modelling and Testing Stray Voltage on Primary Distribution Systems  
Babak Jamali, Kinectrics

9:45 - 10:00 Refreshment Break

10:00 - 10:45 CEATI Projects - Overview and Update  
"Guidelines for the Installation of Surge Arresters"  
"Cost Benefit Analysis for Overhead Lines"

"Evaluation of Cost Reduction for Overhead Lines if Ground Wires are not Used"

Bill Chisholm, Kinectrics

10:45 - 11:30 Smart Ground Testing  
Joseph A. Lanzoni, Lightning Eliminators & Consultants

11:30 - 12:15 History and Performance of Line Arresters Applied to High-Voltage Systems  
Steve Brewer, Hubbell Power Systems

12:15 - 13:15 Lunch

### Session 2

13:15 - 14:00 Lightning Dissipation Array Systems  
Joseph A. Lanzoni, Lightning Eliminators & Consultants

14:00 - 14:45 Vaisala Lightning Detection System  
Ed Bardo, Vaisala

14:45 - 15:05 Evaluating Grounding System Improvements with the "ChizWhiz" Equations  
Bill Chisholm, Kinectrics

15:05 - 15:20 Refreshment Break

15:20 - 16:00 Evaluating Grounding System Condition Using the Three-Terminal Oblique Probe Method  
Bill Chisholm, Kinectrics

16:00 - 16:45 Stray Voltage and Distributed Generation  
Dale Williston, Williston & Associates

16:45 - 17:15 Panel Discussion / Wrap-up

17:45 - 19:15 **Evening Reception**

Join us in the exhibit hall following the technical presentations for our evening reception.

Mingle and make new contacts (don't forget to bring business cards)!



## September 14, 2010

Chaired by John Williamson, GLTF Technical Advisor

7:45 - 8:30 Continental Breakfast

### Session 3

8:30 - 9:15 Mitigation Methods to Put a Stop to Copper Theft in Substations  
Luc Brophy, Hydro-Québec  
Jody Levine, Hydro One Networks

9:15 - 10:00 Impact on Substation Soil and Neutral Potentials on Neighbours  
Peter Dick, Kinectrics

10:00 - 10:15 Refreshment Break

10:15 - 11:00 Impact of Grounding on Distribution System Power Quality  
James Burke, Quanta Technology  
Tao Hong, Quanta Technology

11:00 - 11:30 OPGW Lightning Arc Testing  
Jody Levine, Hydro One Networks

11:30 - 12:00 HQ experience of neutral voltage reduction distribution by using a buried counterpoise  
Jean-Pierre Laflamme, Hydro-Québec

12:00 - 13:00 Lunch

### Session 4

13:00 - 13:45 Review of Grounding and Bonding Practices for Photovoltaic Systems  
Dave Turcotte, National Resources Canada

13:45 - 15:15 **Training Session**  
The Optimum Protection of Power Systems With Arresters  
Jonathan Woodworth, ArresterWorks

15:15 - 15:30 Refreshment Break

15:30 - 16:45 **Training Session (continued)**  
The Optimum Protection of Power Systems With Arresters  
Jonathan Woodworth, ArresterWorks

16:45 - 17:30 Panel Discussion / Wrap-up



The Centre for Energy Advancement through Technological Innovation (CEATI) is a user-driven organization committed to providing technology solutions to its electrical utility participants, who are brought together to collaborate and act jointly to advance the industry through the sharing and development of practical and applicable knowledge.

CEATI's efforts are driven by over 100 participating organizations (electric & gas utilities, government and provincial agencies), represented within 14 focused interest groups.

Continuously expanding its international reach, CEATI's participants represent over 14 countries on 4 continents, a diversity that contributes to the strength of CEATI programs and brings value directly to the participants.

In addition to facilitating information exchange through topic-driven interest groups and industry conferences, CEATI International brings partners together to collaborate on technical projects with a strong practical focus, and develops customized software and training solutions to fit its clients' needs. To do this, CEATI leverages a large network of technology suppliers, with representatives from 1,500 companies worldwide.

#### Benefits of Participation in CEATI Interest Groups:

- Networking with industry professionals
- Leveraging project costs
- Access to international expertise
- Cost-effective project management
- Full-service project administration
- New technology development at a significantly lower cost

## September 15, 2010

Grounding and Lightning Task Force Meeting (GLTF Participants Only).

For more Information on CEATI's GLTF contact [info@ceati.com](mailto:info@ceati.com)