

WEIDMANN

Weidmann Electrical Equipment, Testing, and Insulation System Maintenance Seminar

January 29-31, 2019

Hilton Vancouver Airport , Vancouver, BC Canada

Hosted by:  **BC Hydro** & **Powertech**
Power smart

This 3-Day course focuses on high voltage transformer design, insulation systems, factory and field testing, and the commissioning and maintenance of transformers to ensure sustained asset health. The course is led by a diverse group of industry experts and covers topics of importance to those who approve specifications, ensure that the equipment is suitable for use, or are involved in electrical equipment commissioning and maintenance. Those involved with the design, installation, operation, and maintenance of electric substations will benefit from sharing knowledge. The course topics include transformer and auxiliary protection design, factory and field testing and commissioning issues, and advanced transformer electrical and insulation fluid testing and assessment techniques. Specific maintenance practices including field oil processing, moisture determination techniques, oil sampling and quality testing, and dissolved gas analysis (DGA) are presented.

As a unique event highlight, the attendees will tour Powertech Labs on the third day. This on-site training will include technical presentations in the morning followed by lunch and a guided tour of the HV test facility. Attendees will tour the Applied Chemistry Lab, Mechanical Lab, the HV and High Current Labs, and see demonstrations of the Lightning Impulse Test, RIV and/or PD Tests (or similar depending on equipment availability). **IEEE continuing education units and NETA CTDs are offered for all course attendees at no additional charge.**

PRELIMINARY AGENDA – PRESENTATIONS

Tuesday, January 29, 2019 (8:00am - 5:00pm) – **ELECTRICAL EQUIPMENT AND TESTING**

- Insulation Systems: Design, Function, and Assessment - Tom Prevost, Weidmann Electrical Technology Inc.
- Overview of GSU Maintenance and Practices - Xing Zhang, BC Hydro
- Surge Arrester Specification and Application - Dave Peelo, DF Peelo and Associates, Ltd.
- Dielectric Frequency Response Analysis - Abel Gonzalez Gomez, Megger
- Explosion Resistant Transformer (ERT) Design Basics and Technical Highlights - Luke Wang, BC Hydro
- BC Hydro's Bushing Replacement Program and Lessons Learned to Date - William Ma, BC Hydro
- GSU Transformer Cooling Control and Overheating - Xing Zhang, BC Hydro
- Understanding the Value of Electrical Testing for Power Transformers - Charles Sweetser, OMICRON electronics Corp
- The Mystery of Transformer Temperature Rise Test Explained - Stephen Chan, EC & QA Engineering Ltd

WELCOME RECEPTION (Tuesday evening, 5:00pm - 7:30pm) - all are invited to attend this Reception being held right at the Hilton Vancouver Airport Hotel! An excellent opportunity to socialize with your colleagues while enjoying good food and beverages. During the reception our sponsors will have factory representatives on hand showcasing their products and technology for your learning.

Sponsored by:

- WEIDMANN Electrical Technology Inc
- Leading Edge Sales


Leading Edge Sales

Wednesday, January 30, 2019 (8:00am - 5:00pm) – *INSULATION SYSTEM MAINTENANCE AND FIELD SAFETY*

- Insulating Liquids: Sampling, Oil Quality Testing, and Assessing Electrical Insulation Aging - Nick Perjanik, Weidmann Electrical Technology Inc.
- Moisture in Insulation: Effects, Measurement, and Management - Tom Prevost, Weidmann Electrical Technology Inc.
- Site Vacuum Dryout and Oil Processing - Greg Steeves, Baron USA
- Root Cause Investigation of a 240kV Transformer with Sulphides - Colin Clark, Belinda Di Marco with AltaLink and Mike Lau, Weidmann Electrical Technology Inc
- Safety Issues When Working on Transformers and Tap Changers - Mike Lau, Weidmann Electrical Technology Inc.
- 2018 Electrical Safe Work Practices - Joseph Gierlach, ABM
- Dissolved Gas Analysis (Application and Update to PC57.104™ Draft Guide for the Interpretation of Gases Generated in Mineral Oil-Immersed Transformers) - Nick Perjanik, Weidmann Electrical Technology Inc

Thursday, January 31, 2019 (8:00am - 4:00pm) – *POWERTECH LABS*

- Depart Hotel at 8:00am and travel to Powertech Labs for morning presentations, Lunch and Tour
- Part 1 – Planning: Identification of the Need Through System Modeling and Studies - Bruce Sunga and Giuseppe Stanciulescu, Powertech Labs Inc.
- Part 2 – Engineering and Construction: Specification, Product Testing, Acceptance - Bruce Sunga, Logan Connaughton, and Ken Bognar, Powertech Labs Inc.
- Part 3 – Operations and Maintenance: Asset Health, Failure Investigations - Stuart Chambers and Giuseppe Stanciulescu, Powertech Labs Inc.
- Lunch followed by Facility Tour, Testing Demos and Video of High Power Lab
- Return to Hotel approximately 4:00/4:30pm

Transportation will be provided by WEIDMANN

FACILITY TOUR AND TESTING DEMONSTRATIONS AT POWERTECH LABS INC

Included with this course will be tour and testing demonstrations at Powertech Labs. Powertech, a BC Hydro subsidiary, specializes in clean energy consulting, independent testing and power system solutions. Powertech Labs Inc. is one of the largest testing and research laboratories in North America, situated in beautiful British Columbia, Canada. Their 11-acre facility offers 15 different testing labs for a one-stop-shop approach to managing utility generation, transmission and distribution power systems.

PROCEEDINGS: A digital copy of all the proceedings will be provided to each registered attendee at the start of the course.

REGISTRATION: Individuals: **\$1495** (CAD – plus applicable taxes)

Registration fee includes Presentation Materials, Breakfasts, Lunches and Welcome Reception

BONUS: Register 3, send the 4th FREE! Any organization sending multiple attendees will receive 1 FREE registration with every 3 **paid** registrations.

REGISTRATION INFORMATION: Register online at www.weidmann-electrical.com. For questions call Naomi Girouard at 802-751-3567 or email her at naomi.girouard@weidmann-group.com.

CONTINUING EDUCATION CREDITS:

1.9 IEEE CEUs and 19 NETA CTDs will be available to attendees at no additional cost for the Training Course.

COURSE LOCATION:

HILTON VANCOUVER AIRPORT

5911 Minoru Boulevard | Richmond BC V6X 4C7 | Canada

Reservations can be made by calling 604-232-3990 or 1-800-445-8667

Group Name: Weidmann Power Transformer Technical Course

Group Code: POWER

Book Online at http://www.hilton.com/en/hi/groups/personalized/Y/YVRAHHF-POWER-20190128/index.jhtml?WT.mc_id=POG

A block of rooms from January 28 – February 1, 2019 has been reserved at a discounted rate of \$189.00 single for the Weidmann Course. Reservations should be made by January 8, 2019 to ensure availability at this rate.

QUESTIONS AND MORE INFORMATION

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+1 802 751 3567

naomi.girouard@weidmann-group.com

UPDATED INFORMATION IS AVAILABLE AT: www.weidmann-electrical.com

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Weidmann Electrical Equipment, Testing, and Insulation System Maintenance Seminar Agenda

January 29-31, 2019

Hilton Vancouver Airport , Vancouver, BC Canada

11/7/18

Tuesday, January 29, 2019 – Electrical Equipment and Testing

7:00 - 8:00am	Registration and Continental Breakfast	
8:00 - 8:20am	Welcome and Introductions	<i>Nick Perjanik Weidmann Electrical Technology .</i>
8:20 - 9:20am	Insulation Systems: Design, Function, and Assessment	<i>Tom Prevost Weidmann Electrical Technology Inc.</i>
9:20 - 9:50am	Overview of GSU Maintenance and Practices	<i>Xing Zhang BC Hydro</i>
9:50 - 10:10am	Break	
10:10 - 11:05am	Surge Arrester Specification and Application	<i>Dave Peelo, DF Peelo & Associates, Ltd.</i>
11:05 - 12:00pm	Dielectric Frequency Response Analysis	<i>Abel Gonzalez Gomez Megger</i>
12:00 - 1:00pm	Lunch	
1:00 - 1:30pm	Explosion Resistant Transformer (ERT) Design Basics and Technical Highlights	<i>Luke Wang BC Hydro</i>
1:30 - 2:05pm	BC Hydro's Bushing Replacement Program and Lessons Learned to Date	<i>William Ma BC Hydro</i>
2:05 - 2:50pm	GSU Transformer Cooling Control and Overheating	<i>Xing Zhang BC Hydro</i>
2:50 - 3:10pm	Break	
3:10 - 4:05pm	Understanding the Value of Electrical Testing for Power Transformers	<i>Charles Sweetser OMICRON electronics Corp</i>
4:05 - 5:00pm	The Mystery of Transformer Temperature Rise Test Explained	<i>Stephen Chan EC & QA Engineering Ltd</i>
5:00 - 7:30pm	WELCOME RECEPTION with Vendors On-Hand Showcasing Products and Technologies RECEPTION SPONSORS: Weidmann Electrical Technology, Inc Leading Edge Sales	

Wednesday, January 30, 2019 – Insulation System Maintenance & Field Safety

7:30 - 8:00am	Continental Breakfast	
8:00 - 9:40am	Insulating Liquids: Sampling, Oil Quality Testing, and Assessing Electrical Insulation Aging	<i>Nick Perjanik Weidmann Electrical Technology Inc.</i>
9:40 - 10:00pm	Break	

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Wednesday, January 30, 2019 – Insulation System Maintenance & Field Safety

10:00 - 11:00am	Moisture in Insulation: Effects, Measurement, and Management	<i>Tom Prevost Weidmann Electrical Technology Inc.</i>
11:00 - 12:00am	Site Vacuum Dryout and Oil Processing	<i>Greg Steeves Baron USA</i>
12:00 - 1:00pm	Lunch	
1:00 - 1:45pm	Root Cause Investigation of a 240kV Transformer with Sulphides	<i>Colin Clark, Belinda Di Marco & Mike Lau AltaLink & Weidmann Electrical Technology</i>
1:45 - 2:40pm	2018 Electrical Safe Work Practices	<i>Joseph Gierlach ABM</i>
2:40 - 3:00pm	Break	
3:00 - 3:30pm	Safety Issues When Working on Transformers and Tap Changers	
3:30 - 5:15pm	Dissolved Gas Analysis (Application and Update to PC57.104™ Draft Guide for the Interpretation of Gases Generated in Mineral Oil-Immersed Transformers)	<i>Nick Perjanik Weidmann Electrical Technology Inc.</i>

Thursday, January 31, 2019 – Powertech Labs, Inc

8:00 - 9:00am	Bus Travels to Powertech Labs from Hotel	
9:00 - 9:15am	Assembly and Welcome to Powertech Labs	<i>Raymond Lings & Madhvi Ramnial Powertech Labs Inc</i>
9:15 - 10:00am	Part 1 – Planning: Identification of the Need Through System Modeling and Studies.	<i>Bruce Sunga & Giuseppe Stanciulescu Powertech Labs Inc</i>
10:00 - 10:15am	Break	
10:15 - 11:15am	Part 2 – Engineering and Construction: Specification, Product Testing, Acceptance	<i>Bruce Sunga, Logan Connaughton, and Ken Bogнар Powertech Labs Inc</i>
11:15 - 12:15pm	Part 3 – Operations and Maintenance: Asset Health, Failure Investigations	<i>Stuart Chambers & Giuseppe Stanciulescu Powertech Labs Inc</i>
12:15 - 1:15pm	Lunch at Powertech Labs facility	
1:15 - 3:15pm	<i>Facility Technical Tours, Test Demos, and Video of High Power Lab (led by Madhvi Ramnial & Giuseppe Stanciulescu)</i>	
3:15 - 4:00pm	Bus Travel back to Hilton Vancouver Airport Hotel	

Continuing Education

As a full participant in the Course you will be able to receive:

**1.9 IEEE Continuing Education Credits (CEUs); Professional Development Hours; and/or
19 NETA Continuing Technical Development Credits (CTDs)**

Please Return Completed Applications for **IEEE CEUs to Event Coordinator.**
Return Applications for NETA CTDs to **YOUR NETA company representative or directly to NETA.**

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REGISTRATION FORM

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January 29 – 31, 2019 – Vancouver, BC

CONFERENCE LOCATION:

HILTON VANCOUVER AIRPORT
5911 Minoru Boulevard, Richmond BC V6X 4C7 Canada
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http://www.hilton.com/en/hi/groups/personalized/Y/YVRAHH-F-POWER-20190128/index.jhtml?WT.mc_id=POG

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REGISTRATION:

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TO REGISTER (4 options to register)

- Call 802-751-3567
- FAX Registration Form to 802-751-3555
- or scan and e-mail Registration Form to naomi.girouard@weidmann-group.com
- or mail the form to
Weidmann, Attn: Naomi Girouard
One Gordon Mills Way, St. Johnsbury, VT 05819.

QUESTIONS or MORE INFORMATION: For agenda or event questions, contact Naomi Girouard at 802.751.3567 or naomi.girouard@weidmann-group.com

PLEASE REGISTER THE FOLLOWING

- For every 3 PAID attendees from your company, the 4th registration is FREE.
 \$1495.00 (CAD) Transformer Course Registration

How did you hear about this event: (Direct email, Colleague, Speaker(s),etc.) _____

Name _____ Job Title _____

Company _____

Company Address _____ City _____

State/Prov. _____ Zip _____ Country _____

Telephone _____ Mobile: _____ Fax _____

Email _____

PAYMENT METHOD

_____ Pay with Credit Card _____ Check enclosed _____ Invoice Me

To pay with a credit card (Visa MC, or AMEX), please contact Naomi Girouard at 802-751-3567. By check, enclose a check and mail with this form to: Weidmann, Attn: Naomi Girouard, One Gordon Mills Way, St. Johnsbury, VT 05819.

Register Today! For Questions Call +802-751-3567 or email to: naomi.girouard@weidmann-group.com