



TRANSFORMERS COMMITTEE



September 2, 2016

Dear Committee Members and Guests:

You and your companion are cordially invited to Vancouver and beautiful British Columbia, Canada to attend the Fall 2016 meeting of the IEEE/PES Transformers Committee, to be held October 23-27. We look forward to welcoming you to the Canadian Pacific Northwest!

HOTEL INFORMATION: Our meeting will be held in the heart of downtown Vancouver at the **Sheraton Vancouver Wall Centre Hotel**, 1088 Burrard Street. Trendy Yaletown, eclectic Granville Island, historic Gastown and spectacular Stanley Park and Vancouver Aquarium are all within walking distance. Our discounted guestroom rate at the Sheraton is CAD\$189, including complimentary fitness center use and wireless internet in the guestrooms. Visit the Committee's website for a link to reserve a room, or if you call the hotel, mention "IEEE Transformers" to receive the group rate. The cut-off date for the group rate is Friday, September 30, but we expect the hotel to sell out well before this date.

GETTING THERE: The Sheraton Wall Centre Hotel is located approx. 10 miles (17 km) from Vancouver International Airport (YVR). Taxi fare to downtown Vancouver is approximately CAD\$35 one way. Parking at the hotel is expensive, at CAD\$33-38/night. Parking in the street is permitted.

MEETING REGISTRATION: Register on-line at www.transformerscommittee.org for social events, tours and the meeting. Register by Friday, September 30 to receive a US\$50 early registration discount. The on-line registration system will be disabled on Wednesday, October 19 to print name badges and finalize counts. The cost to register on-site is substantially higher than the advance registration price.

WEATHER: Fall in Vancouver is comfortable, with an average high of 54°F/12°C and evening low of 43°F/6°C. Come prepared for all kinds of weather in the same day ... in Vancouver, we say "wear layers". Most of our events are indoors, and we are hoping for great weather during your visit! Dress for the meeting is business casual.

SATURDAY EARLY BIRD EVENTS: If you arrive early, we have TWO events to enjoy. For those who arrive very early, join us for a breathtaking all-day tour of Vancouver Island and our capital city of Victoria, including a visit to the famous **Butchart Gardens**. We expect this tour to sell out quickly, so register early!

For those who arrive Saturday, join us on a walk across the street from the hotel for an evening at **The Comedy Mix**, a local comedy club where, what we call "appys", will be served. Showtime is 8:00 pm, but we'll walk over a bit early to enjoy the food and fellowship. See flyers for details.

SUNDAY EVENING WELCOME RECEPTION: Renew old friendships and form new ones! This reception will be held in the magnificent Pavilion Ballroom at the Sheraton Wall Centre. A cash bar and plenty of fabulous food and soft music will be provided. Registered meeting attendees and spouses/companions are welcome to attend. Please indicate whether you will attend this reception during the meeting registration process.

WEDNESDAY DINNER SOCIAL: We invite you to join us on a spectacular ocean dinner cruise aboard the MV Britannia. Watch the unmatched beauty of Vancouver's skyline and mountain views as you dine with your colleagues on this elegant sunset cruise around **Stanley Park**, under the **Lions Gate Bridge** and past the beaches of **English Bay**. Enjoy live music, dancing and indulge in a freshly-prepared gourmet dinner inspired by West Coast cuisine. Shuttle buses will run between the Sheraton and the cruise ship for your convenience. Attendance is limited to 250 participants, so register early.

SPOUSE/COMPANION TOURS: Monday's excursion is the **Sea to Sky Highway Tour**. Rated as one of the most scenic highways in the world, experience the spectacular views of **Shannon Falls** and **Mount Habrich**. Ride the **Sea to Sky Gondola** and be greeted with breathtaking panoramic views of the coastal mountain range, Stawamus Chief and **Howe Sound** vistas. Lunch will be provided at the stunning **Summit Lounge** on top of the mountain. See flyer for details.

Tuesday is the **Vancouver City Tour**, where we will spend the morning exploring the sights of Stanley Park, a 1000 acre forest set in the heart of downtown. The tour continues along the Vancouver shoreline to the University of British Columbia and the Museum of Anthropology, where professional guides will take you on a fascinating walk-through of Canadian Pacific Coast history. Participants will enjoy a three course lunch at Seasons in the Park restaurant beautiful Queen Elizabeth Park. Tour concludes with drive-throughs of Chinatown and historical Gastown. Attendance is extremely limited on the Tuesday tour (one bus, ~50 people), so register early. See flyer for details.

TECHNICAL TOURS: On Monday evening, a dinner and a *virtual plant tour* will be provided with your Local Meeting Host, **IFD Corporation**. Following meetings on Tuesday evening, visit the **TRIUMF Particle Accelerator** at the University of British Columbia. On Thursday afternoon, following the Closing Session, visit BC Hydro's **PowerTech Labs** to learn about their 19 different laboratories, as one of the largest testing, research and development facilities in North America, supporting utilities and electric manufacturers.

ADDITIONAL MEETING INFORMATION: Along with this invitation letter, additional meeting information can be downloaded from the Committee's website at www.transformerscommittee.org:

- Registration Fee Summary. Use this as a guide to review the fees for each activity before you begin the on-line registration process.
- Meeting Schedule and General Sessions Agenda. If any noteworthy changes are made, an updated schedule will be posted on the Committee's website a few days prior to the meeting.
- Other informational flyers, including those for the Saturday Early Bird Events, Wednesday Dinner Social, Spouse/Companion Tours and technical presentations.

Note too that, in association with this meeting, we will be selling the "fruits of our labor", at a special discounted conference price: **2016 IEEE Transformers Standards Collection, CD-ROM**. You may purchase the CD with the on-line meeting registration system, and it will be mailed directly to meeting attendees immediately after the meeting. See flyer for more information.

We look forward to seeing you at the Fall 2016 Meeting, and we are certain you will enjoy the spirit of the Canadian Pacific Northwest which is Vancouver!

Paul Chisholm

IFD Corporation
#3-8755 Ash Street
Vancouver, BC Canada V6P 6T3



IEEE/PES TRANSFORMERS COMMITTEE

Fall 2016 Meeting; Vancouver, BC Canada

-- Meeting Registration Fees Summary --

Register on-line with credit card at www.transformerscommittee.org ("Next Meeting" page).

Contact the Committee at transformers@ieee.org if an alternate form of payment is necessary.

Each individual must register for meeting (with registration fee) to attend Sunday Reception or any social event or tour.

Print a receipt at the end of the registration process. Paper receipts will NOT be provided at the meeting.

Refund provided only if the request is received by Wednesday, October 19. Valid once confirmation email is received.

US\$25 service charge for a refund of entire registration; or US\$10 for a partial refund.

US Tax ID No. 13-1656633, Canadian Business No. 12563 4188, Euro Tax Registration No. EU826000081

REGISTRATION FEES -- all fees in US\$ dollars -- all fees stated are "per person"	On or Before September 30	After Sept 30, on or before October 19	On-site, at Meeting
MEETING REGISTRATION			
Attendee, IEEE member (will be verified with IEEE)	\$300	\$350	\$450
Attendee, not an IEEE member	\$350	\$400	\$500
Attendee, IEEE Life or Committee Emeritus (will be verified)	\$100	\$150	\$250
Spouse or Companion, and children age 12 and over	\$100	\$150	\$250
Attendee Registration Fee Includes: Entry into Meeting Area, Sunday Reception, coffee breaks, 4 breakfasts (M, T, W, Th) Spouse/Companion Registration Fee Includes: Sunday Reception, 4 breakfasts (Mon, Tues, Wed, Thurs)			
A Companion is a "significant other", boy/girlfriend, who is attending for <u>non-commercial</u> reasons; i.e., not attending the technical meetings, etc.). Spouses/companions & children (age 12 and over) must be registered for the meeting - with above meeting registration fees - to attend any tour or social event.			
RECEPTION & LUNCHEONS			
Sunday Evening Welcome Reception -- Indicate your plan to attend the reception when you register.	-- cost included in meeting registration fee --		
Monday Standards Development Luncheon -- All SC, WG, TF leaders are encouraged to attend. -- Buffet lunch; no need to choose a meal selection.	\$25	\$25	\$25
Tuesday Awards Luncheon -- Indicate a meal selection: beef, chicken, or vegetarian.	\$35	\$35	\$35
SOCIAL EVENTS (see flyers for details)			
Saturday Early Bird Event #1: Vancouver Island & Victoria ** -- all-day tour, with visit to Butchart Gardens, and lunch at Vista 18.	\$175	\$175	--
Saturday Early Bird Event #2: Comedy Club -- heavy appetizers & cash bar; across the street from the Sheraton.	\$35	\$35	--
Wednesday Social: Dinner Cruise aboard the MV Britannia -- buffet dinner; no need to choose a meal selection.	\$85	\$85	--
** Attendance limited. Will sell out quickly. Register early!			
SPOUSE/COMPANION TOURS (each tour includes lunch; see flyers for details)			
Monday: Sea to Sky Tour, Shannon Falls, Gondola to Mt. Habrich	\$85	\$85	--
Tuesday: Vancouver Tour, MOA, QE Park, Sunken Gardens ***	\$95	\$95	--
*** Attendance is EXTREMELY limited for Tuesday Tour (only one bus). Register early!			
TECHNICAL TOURS (everyone invited; see flyers for details; sign-up during registration for meeting)			
Monday Evening: IFD Corporation, includes dinner.	\$0	\$0	--
Tuesday Evening: TRIUMF National Laboratory, dinner on your own.	\$15	\$15	--
Thursday Afternoon: Powertech Test Facility, includes box lunch.	\$0	\$0	--

IEEE/PES TRANSFORMERS COMMITTEE
www.transformerscommittee.org
Fall 2016 Meeting; October 23-27
Hosted by IFD Corporation
Sheraton Vancouver Wall Centre Hotel; Vancouver BC, Canada

See Page 5 for a key to abbreviations.

ALL MEETINGS ARE IN THE NORTH TOWER OF THE HOTEL.

<u>DATE/TIME</u>	<u>ACTIVITY</u>	<u>SUB-COM</u>	<u>ACTIVITY CHAIR</u>	<u>ROOM CAP/ARR/AV</u>	<u>MEETING ROOM</u>
Friday, October 21					
8:00 am - 5:00 pm >	WG Step-Voltage Regulators 60076-57-15	Dist	C. Colopy	14 US	Port Alberni (4th FL)
Saturday, October 22					
	No Committee Meetings, No Technical Tours				
7:15 am to 7:30 pm	<u>Early Bird Event #1:</u> Vancouver Island & Victoria Tour, a full-day tour. -- Advance on-line registration necessary. Limited attendance. <u>Will sell out quickly!</u> See flyer for details. -- Buses depart Sheraton Hotel at 7:15 am. Return at ~7:30 pm.				
6:30 pm to 10:00 pm	<u>Early Bird Event #2:</u> "The Comedy Mix" Comedy Club, at nearby Century-Plaza Hotel -- Advance on-line registration necessary. Limited attendance. <u>Will sell out early.</u> See flyer for details. -- Meet in hotel lobby and walk together across street to the Club. Depart lobby at 6:30 pm. Return ~10:00 pm.				
Sunday, October 23					
	No Technical Tours or Social Tours				
1:00 pm - <u>5:30 pm</u>	Meeting Registration				North Tower Main Lobby
2:00 pm - 5:30 pm	Administrative SC -- Closed meeting, by invitation only	Admin.	S. Antosz	24 US	Port McNeill (4th FL)
2:00 pm - 5:30 pm	NEMA Transformers -- Closed meeting, by invitation only	++	J. Caskey	14 US	Port Alberni (4th FL)
6:00 pm - 8:00 pm	Welcome Reception			500 Reception	Pavilion Ballroom with Foyer (3rd FL)
Monday, October 24 -- Monday Breaks Sponsored by R.L. Components **					
7:00 am - 5:00 pm	Meeting Registration				North Tower Main Lobby
<u>7:00 am</u> - 7:50 am	Newcomers Orientation -- Breakfast Meeting; arrive early! -- Newcomers & Guests are encouraged to attend!		S. McNelly	<u>80 CL</u> S2 (with buffet)	Junior Ballroom CD (3rd FL)
<u>7:00 am</u> - 7:50 am	Distribution SC Leaders Coordination -- Closed breakfast meeting, by invitation only		S. Shull	14 BD	Port Hardy
7:00 am - 8:00 am	Breakfast - Attendees (no spouses/companions please)			300 RT (8/tbl)	Pavilion Ballroom ABCD (3rd FL)
8:00 am - 9:30 am	Breakfast - Spouses/Companions (no meeting attendees please)			100 RT (10/tbl)	S. Tower, 34th Floor Event Space
9:15 am - 3:15 pm	<u>Spouses/Companions Tour:</u> Sea to Sky Tour, including stops at Shannon Falls and Horseshoe Bay, with gondola ride and lunch on Mount Habrich. Advance registration required. See flyer for details. -- Bus departs from front of hotel at 9:15 am, and returns at ~3:15 pm.				
8:00 am - 9:15 am >	Opening Session -- <u>All attendees</u> are encouraged to attend -- See separate document for meeting agenda -- Attendance required to maintain Committee Member status.		S. Antosz	550 MX S1	Grand Ballroom ABCD
9:15 am - 9:30 am	<i>Break (beverages only)</i>				
	Grand Ballroom & Jr. Ballroom Foyers				

** Contact Ed Smith (edsmith@ieee.org) if you are interested in sponsoring a coffee break at a future meeting.

<u>DATE/TIME</u>	<u>ACTIVITY</u>	<u>SUB-COM</u>	<u>ACTIVITY CHAIR</u>	<u>ROOM CAP/ARR/AV</u>	<u>MEETING ROOM</u>
Monday, October 24 (continued)					
	WG Submersible Transf. C57.12.24	UTNP	Work is near completion. Resolving ballots.		
9:30 am - 10:45 am	WG Thermal Evaluation of Insulation Systems, Dry Type C57.12.60	Dry	R. Wicks	60 MX	Port Alberni (4th FL)
9:30 am - 10:45 am	--	--	--	80 MX	Port McNeill (4th FL)
9:30 am - 10:45 am	TF External Dielectric Clearances	DiTests	E. Davis	80 MX	Jr. Ballroom AB
9:30 am - 10:45 am	WG Tertiary/Stabilizing Windings PC57.158	PCS	E. Betancourt	<u>160 MX</u> S3 (80 CL + 80 TH)	Jr. Ballroom CD
9:30 am - 10:45 am	TF Consolidation of Insulating Fluid Guides	IF	T. Prevost	200 MX S3	Grand Ballroom AB
9:30 am - 10:45 am	TF Transformer Efficiency and Loss Evaluation (DOE Activity)	Dist	P. Hopkinson	250 MX S3	Grand Ballroom CD (+ Passage)
10:45 am - 11:00 am	<i>Break (beverages only)</i>			Grand Ballroom & Jr. Ballroom Foyers	
11:00 am - 12:15 pm	WG Ventilated Dry Type C57.12.51	Dry	S. Som	60 MX	Port Alberni (4th FL)
11:00 am - 12:15 pm	--	--	--	80 MX	Port McNeill (4th FL)
11:00 am - 12:15 pm	WG Overhead Distr. Transf. C57.12.20	Dist	A. Traut	80 MX	Jr. Ballroom AB
11:00 am - 12:15 pm	WG Control Cabinets PC57.148	Power	J. Watson	160 MX S3	Jr. Ballroom CD
11:00 am - 12:15 pm	WG Moisture in Insulation PC57.162	IL	T. Prevost	200 MX S3	Grand Ballroom AB
11:00 am - 12:15 pm	TF PCS Rev. to Test Code C57.12.90	PCS	M. Perkins	250 MX S3	Grand Ballroom CD
12:15 pm - 1:30 pm	<u>Lunch Meeting:</u> Standards Development Review		J. Graham	240 RT (7/tbl)	Pavilion Ballroom
	-- <u>Everyone</u> welcome to attend. All SC/WG/TF leaders are <u>highly encouraged</u> to attend. ABCD				
	-- Doors open ~12:00 pm. Come early, get a good seat, and start eating.				
	-- Advance registration necessary. No paper tickets. Admission verified with name badge at the door.				
	-- Anyone can join us for this luncheon, and sit & listen to the presentation, without eating lunch.				
	Suggested time to arrive for only the presentation (without lunch) is 12:30 pm.				
1:45 pm - 3:00 pm	WG Sec. Network Protectors C57.12.44	UTNP	M. Faulkner	60 MX	Port Alberni (4th FL)
1:45 pm - 3:00 pm	WG Dry Type Gen. Require. C57.12.01	Dry	C. Ballard	80 MX	Port McNeill (4th FL)
1:45 pm - 3:00 pm	WG 1-ph Padmount Dist Transf C57.12.38	Dist	A. Ghafourian	80 MX	Jr. Ballroom AB
1:45 pm - 3:00 pm	WG Thru-Fault Current Duration PC57.109	PCS	V. Mehrotra	160 MX S3	Jr. Ballroom CD
1:45 pm - 3:00 pm	WG Installation of Power Transf. C57.93	Power	M. Lau	200 MX S3	Grand Ballroom AB
1:45 pm - 3:00 pm	TF Audible Sound Revision to Test Code	PCS	R. Girgis	250 MX S3	Grand Ballroom CD
3:00 pm - 3:15 pm	<i>Break (beverages and treats)</i>			Grand Ballroom & Jr. Ballroom Foyers	
	WG Milli-amp Current Transf. C57.13.7	IF	Will not meet. Balloting document.		
3:15 pm - 4:30 pm	SC HVDC Converter Transformers and Smoothing Reactors	HVDC	M. Sharp	60 MX	Port Alberni
3:15 pm - 4:30 pm	--	--	--	80 MX	Port McNeill
3:15 pm - 4:30 pm	WG 3-ph Padmount Dist Transf. C57.12.34	Dist	R. Stahara	80 MX	Jr. Ballroom AB
3:15 pm - 4:30 pm	WG Natural Ester-Based Fluids C57.147	IF	P. McShane	160 MX S3	Jr. Ballroom CD
3:15 pm - 4:30 pm	WG Dielectric Freq. Response PC57.161	DiTest	A. Naderian	200 MX S3	Grand Ballroom AB
3:15 pm - 4:30 pm	WG Transformer Capability with Non-sinusoidal Loads PC57.110	PCS	R. Marek	250 MX S3	Grand Ballroom CD
4:30 pm - 4:45 pm	<i>Break (beverages only)</i>			Grand Ballroom & Jr. Ballroom Foyers	
4:45 pm - 6:00 pm	--	--	--	60 MX	Port Alberni (4th FL)
4:45 pm - 6:00 pm	WG PD in Bushings & PT/CTs PC57.160	DiTests	T. Hochanh	80 MX	Port McNeill (4th FL)
4:45 pm - 6:00 pm	WG Step-Voltage Regulators C57.15 / 60076-21	Dist	C. Colopy	80 MX	Jr. Ballroom AB
4:45 pm - 6:00 pm	--	--	--	160 MX S3	Jr. Ballroom CD
4:45 pm - 6:00 pm	WG Life Extension C57.140	Power	P. Boman	200 MX S3	Grand Ballroom AB
4:45 pm - 6:00 pm	TF PCS Revisions to C57.12.00	PCS	T. Ansari	250 MX S3	Grand Ballroom CD
6:30 pm - 10:00 pm	<u>Technical Tour:</u> IFD Corporation Tour, Vancouver Facility, <u>with BBQ dinner</u> (www.ifdcorporation.com)				
	-- Everyone welcome to attend, but <u>register in advance</u> during on-line meeting registration.				
	-- Buses depart from front of hotel at 6:30 pm, and return by 10:00 pm. See flyer for more info.				

<u>DATE/TIME</u>	<u>ACTIVITY</u>	<u>SUB-COM</u>	<u>ACTIVITY CHAIR</u>	<u>ROOM CAP/ARR/AV</u>	<u>MEETING ROOM</u>
Tuesday, October 25 -- Tuesday Breaks Sponsored by WEG Electric Corp. **					
7:00 am - 12:00 pm	Meeting Registration				Main Lobby
7:00 am - 8:00 am	Breakfast - Attendees (no spouses/companions please)			300 RT (8/tbl)	Pavilion Ballroom ABCD
8:00 am - 9:30 am	Breakfast - Spouses/Companions (no meeting attendees please)			100 RT (10/tbl)	S. Tower, 34th Floor Event Space
<u>7:00 am</u> - 7:50 am	EL&P Delegation (end-users only please) -- Breakfast Meeting; arrive early		J. Murphy	30 CL (with buffet)	Parkville
9:15 am - 3:45 pm	<u>Spouses/Companions Tour:</u> Vancouver City Tour with Museum of Anthropology, with stops at Stanley Park and Queen Elizabeth Park. Advance registration required. See flyer for details. -- Bus departs from front of hotel at 9:15 am, and returns at ~3:45 pm. VERY LIMITED ATTENDANCE!				
	TF Composite Bushings	Bush	Work complete, report submitted in April 2016.		
8:00 am - 9:15 am	WG Enclosure Integrity C57.12.28, C57.12.29, C57.12.31, C57.12.32	Dist	D. Mulkey	60 MX	Port Alberni (4th FL)
8:00 am - 9:15 am	WG Station Service Volt. Transf. C57.13.8	IT	D. Wallace	80 MX	Port McNeill (4th FL)
8:00 am - 9:15 am	--	--	--	80 MX	Jr. Ballroom AB
8:00 am - 9:15 am	TF Limits for Winding Insulation PF/Resistance	DiTests	S. Tarlapally	160 MX S3	Jr. Ballroom CD
8:00 am - 9:15 am	WG Dry Type PD Detection C57.124	Dry	T. Prevost	200 MX S3	Grand Ballroom AB
8:00 am - 9:15 am	WG Revision to C57.12.10	Power	G. Hoffman	250 MX S3	Grand Ballroom CD
9:15 am - 9:30 am	<i>Break (beverages only)</i>			Grand Ballroom & Jr. Ballroom Foyers	
9:30 am - 10:45 am	--	--	--	60 MX	Port Alberni (4th FL)
9:30 am - 10:45 am	WG Tests for Instrument Transf. C57.13.5	IT	P. Riffon	80 MX	Port McNeill (4th FL)
9:30 am - 10:45 am	WG 1-Ph Submersible Transf. C57.12.23	UTNP	A. Traut	80 MX	Jr. Ballroom AB
9:30 am - 10:45 am	WG GSU Bushings PC57.19.04	Bush	S. Digby	160 MX S3	Jr. Ballroom CD
9:30 am - 10:45 am	WG Shunt Reactors C57.21	PCS	S. Som	200 MX S3	Grand Ballroom AB
9:30 am - 10:45 am	WG Wind Turbine Transf. P60076-16	PCS	D. Buckmaster	250 MX S3	Grand Ballroom CD
10:45 am - 11:00 am	<i>Break (beverages only)</i>			Grand Ballroom & Jr. Ballroom Foyers	
11:00 am - 12:15 pm	WG PD Acoustic Detection C57.127	DiTests	D. Gross	60 MX	Port Alberni (4th FL)
11:00 am - 12:15 pm	TF PLC Caps & CCVTs (currently C93.1)	IT	Z. Roman	80 MX	Port McNeill (4th FL)
11:00 am - 12:15 pm	WG Liquid-immersed Secondary Network Transformers C57.12.40	UTNP	B. Klaponski	80 MX	Jr. Ballroom AB
11:00 am - 12:15 pm	WG Distrib. Transf. Bushings PC57.19.02	Bush	S. Shull	160 MX S3	Jr. Ballroom CD
11:00 am - 12:15 pm	WG Semiconductor Power Rectifier Transformers C57.18.10	PCS	S. Kennedy	200 MX S3	Grand Ballroom AB
11:00 am - 12:15 pm	WG Loss Evaluation Guide C57.120	PCS	R. Verdolin	250 MX S3	Grand Ballroom CD
12:15 pm - 1:30 pm	<u>Awards Luncheon</u> -- Doors open ~12:00 pm. Come early, get a good seat, and start eating. -- Advance registration necessary. No paper tickets. Admission verified with name badge at the door. All meeting attendees are encouraged to attend this luncheon. It's a great way to show your appreciation and help us recognize our accomplishments.		D. Platts	240 RT (7/tbl)	
1:45 pm - 3:00 pm	WG 3-ph Transf. Connections PC57.105	PCS	A. Bromley	60 MX	Port Alberni (4th FL)
1:45 pm - 3:00 pm	WG Distr. Substation Transf. C57.12.36	Dist	J. Murphy	80 MX	Port McNeill (4th FL)
1:45 pm - 3:00 pm	--	--	--	80 MX	Jr. Ballroom AB
1:45 pm - 3:00 pm	TF LTC Std Require C57.131 / 60214-1	Power	C. Colopy	160 MX S3	Jr. Ballroom CD
1:45 pm - 3:00 pm	TF Revision to Low Frequency Tests	DiTests	B. Griesacker	200 MX S3	Grand Ballroom AB
1:45 pm - 3:00 pm	WG DPV Grid Transformers PC57.159	PCS	H. Shertukde	250 MX S3	Grand Ballroom CD
3:00 pm - 3:15 pm	<i>Break (beverages and Pretzels!)</i>			Grand Ballroom & Jr. Ballroom Foyers	

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<u>DATE/TIME</u>	<u>ACTIVITY</u>	<u>SUB-COM</u>	<u>ACTIVITY CHAIR</u>	<u>ROOM CAP/ARR/AV</u>	<u>MEETING ROOM</u>
Tuesday, October 25 (continued)					
3:15 pm - 4:30 pm	WG Std Terminal Markings C57.12.70	Stds	S. Shull	60 MX	Port Alberni (4th FL)
3:15 pm - 4:30 pm	WG Dry Type Reactors PC57.16	Dry	A. Del Rio	80 MX	Port McNeill (4th FL)
3:15 pm - 4:30 pm	WG Std Require for Bushings C57.19.01	Bush	S. Zhang	80 MX	Jr. Ballroom AB
3:15 pm - 4:30 pm	WG LTC Application Guide 60214-2	Power	C. Colopy	160 MX S3	Jr. Ballroom CD
3:15 pm - 4:30 pm	WG High-Temp Insulat. Materials, P-1276	IL	R. Wicks	200 MX S3	Grand Ballroom AB
3:15 pm - 4:30 pm	TF Switching Transients Induced by Transf/Breaker Interaction PC57.142	PCS	J. McBride	250 MX S3	Grand Ballroom CD
4:30 pm - 4:45 pm	<i>Break (beverages only)</i>			Grand Ballroom & Jr. Ballroom Foyers	
4:45 pm - 6:00 pm	TF Cross Reference of IEEE to IEC	Stds	V. Mehrotra	60 MX	Port Alberni (4th FL)
4:45 pm - 6:00 pm	WG Dry Type Test Code C57.12.91	Dry	D. Foster	80 MX	Port McNeill (4th FL)
4:45 pm - 6:00 pm	WG Tank Pressure Coordinat. C57.12.39	Dist	C. Gaytan	80 MX	Jr. Ballroom AB
4:45 pm - 6:00 pm	WG Short Circuit Withstand PC57.164	PCS	S. Patel	160 MX S3	Jr. Ballroom CD
4:45 pm - 6:00 pm	WG Gas Guide C57.104	IF	C. Beauchemin	200 MX S3	Grand Ballroom AB
4:45 pm - 6:00 pm	TF Revisions to Impulse Test Sections of C57.12.00 and C57.12.90	DiTests	P. Riffon	250 MX S3	Grand Ballroom CD
7:00 pm - 10:00 pm	<u>Technical Tour:</u> TRIUMF National Laboratory for Physics and Accelerator-Based Science (www.triumf.ca) -- Everyone welcome, but <u>register in advance</u> during on-line meeting registration. See flyer for more info. -- <u>Dinner on your own</u> (eat beforehand). Buses depart from <u>front of hotel</u> at 7:00 pm, and return ~10:00 pm.				
Wednesday, October 26 -- Wednesday Breaks Sponsored by Cogent Power **					
	No Meeting Registration, No Technical Tours, No Spouse/Companion Tours				
7:00 am - 8:00 am	Breakfast - Attendees (no spouses/companions please)			300 RT (8/tbl)	Pavilion Ballroom
8:00 am - 9:30 am	Breakfast - Spouses/Companions (no meeting attendees please)			100 RT (10/tbl)	S. Tower, 34th Floor Event Space
<u>7:00 am</u> - 7:50 am	SC Meetings Planning	Mtgs	G. Anderson	30 CL (with buffet)	Parkville
<u>7:00 am</u> - 8:30 am	IEC TC-14 Technical Advisory Group -- Breakfast Meeting; arrive early -- All interested individuals welcome	++	P. Hopkinson	80 CL S2 (with buffet)	Jr. Ballroom CD
8:00 am - 9:15 am	SC Instrument Transformers	IT	R. McTaggart	80 MX	Jr. Ballroom AB
8:00 am - 9:15 am	SC Insulation Life	IL	S. Kennedy	350 MX S3	Grand Ballroom
9:15 am - 9:30 am	<i>Break (beverages only)</i>				
9:30 am - 10:45 am	SC Bushings	Bush	P. Zhao	160 MX S3	Jr. Ballroom CD
9:30 am - 10:45 am	SC Distribution Transformers	Dist	S. Shull	350 MX S3	Grand Ballroom
10:45 am - 11:00 am	<i>Break (beverages only)</i>				
11:00 am - 12:15 pm	SC UG Transf. & Network Protectors	UTNP	D. Mulkey	80 MX	Jr. Ballroom AB
11:00 am - 12:15 pm	SC Dielectric Tests	DiTests	A. Varghese	350 MX S3	Grand Ballroom
12:15 pm - 1:30 pm	Lunch (on your own)				
1:30 pm - 2:45 pm	SC Dry Type Transformers	Dry	C. Johnson	80 MX	Jr. Ballroom AB
1:30 pm - 2:45 pm	SC Power Transformers	Power	J. Watson	350 MX S3	Grand Ballroom
2:45 pm - 3:00 pm	<i>Break (beverages and treats)</i>				
3:00 pm - 4:15 pm	SC Insulating Fluids	IF	D. Wallach	160 MX S3	Jr. Ballroom CD
3:00 pm - 4:15 pm	SC Performance Characteristics	PCS	E. teNyenhuus	350 MX S3	Grand Ballroom
4:15 pm - 4:30 pm	<i>Break (beverages only)</i>				
4:30 pm - 5:45 pm	SC Standards	Stds	J. Murphy	160 MX S3	Jr. Ballroom CD
5:45 pm - 10:00 pm	<u>Evening Social:</u> Dinner Cruise aboard the <u>MV Britannia</u> . Advance registration is necessary. -- 10-min bus ride to boat. Buses begin loading at <u>front of hotel</u> at 5:45 pm. <u>Last bus departs at 6:30 pm</u> . -- Boarding and appetizers 6:30 to 7:00 pm. Embark at 7:00 pm. Return to hotel ~10:00 pm. -- Paper tickets will not be provided. Admission verified with name badges as you board the boat. -- Temperatures will be cool, so dress appropriately.				

** Contact Ed Smith (edsmith@ieee.org) if you are interested in sponsoring a coffee break at a future meeting.

KEY

Note: A PC projector will be furnished in each meeting room. Arrive early to ensure equipment operates/syncs correctly.

> -- activity continued into another session / from another session

++ -- not a Transformers Committee activity TBD = "To Be Determined"

FC = flip chart; S1 = sound (special set-up)

S2 = stand mic in front only; S3 = one stand mic in front & stand mic(s) at mid-room

BD = boardroom; US = U-shape

RT = multiple roundtables

CL = classroom seating (w/head table for 2)

TH = theater seating (w/head table for 2)

MX = mix classroom & theater (w/head table)

SUBCOMMITTEES

Bush	Bushings	HVDC	HVDC Converter Transformers and Smoothing Reactors	Mtgs	Meetings
DiTests	Dielectric Tests			Power	Power Transformers
Dist	Distribution Transformers	IF	Insulation Fluids	UTNP	Underground Transformers and Network Protectors
Dry	Dry Type Transformers	IL	Insulation Life		
		IT	Instrument Transformers	Stds	Standards

Thursday, October 27

No Meeting Registration, No Spouses/Companions Tours				
7:00 am - <u>9:30 am</u>	Breakfast - Attendees (no spouses/companions please)	250	RT (8/tbl)	Pavilion Ballroom
	Breakfast - Spouses/Companions (no meeting attendees please)	80	RT (8/tbl)	S. Tower, 34th Floor Event Space
8:00 am - 9:15 am	Technical Presentation #1: "Changes & Additions to C57.12.00 and C57.12.90 in the 2015 Revisions" by S. Antosz and S. Snyder. See flyer on website. **	350	MX S1	Grand Ballroom ABCD
9:15 am - 9:30 am	<i>Break (beverages only)</i>	Grand Ballroom Foyer		
9:30 am - 10:45 am	Technical Presentation #2: "Tacit Knowledge Capture and Brain-Drain at Electric Utilities; an IEEE Perspective" by N. Perjanik and A. VanderWalt. See flyer on website. **	350	MX S1	Grand Ballroom ABCD
10:45 am - 11:00 am	<i>Break (beverages only)</i>	Grand Ballroom Foyer		
> 11:00 am - 12:00 pm	Closing Session -- <u>All attendees</u> are encouraged to attend -- See separate document for meeting agenda	S. Antosz	350 MX S1	Grand Ballroom ABCD
Lunch on your own				
1:00 pm - 5:00 pm >	WG Tap Changer Application Guide 60214-2 (continued Friday)	Power	A. Kraemer	14 US Port Alberni (4th FL)
12:30 pm - 5:00 pm	<u>Technical Tour:</u> Powertech Test and Research & Development Facility (www.powertechlabs.com) -- Everyone welcome, but <u>register in advance</u> during on-line meeting registration. See flyer for more info. -- Box lunch provided on the bus. Bus departs front of hotel at 12:30 pm, and return ~5:00 pm.			

Friday, October 28

No Technical Tours					
> 8:00 am - 5:00 pm	WG Tap Changer Application Guide 60214-2 (continued from Thursday)	Power	A. Kraemer	14 US	Port Alberni (4th FL)

** Contact Tom Prevost (tprevost@ieee.org) if you are interested in making a technical presentation at a future meeting.

FUTURE COMMITTEE MEETINGS

Spring 2017: April 2-6; New Orleans, Louisiana USA

Fall 2017: October 15-19 or 23-26, or October 29-November 2; USA Location (to be determined)

Spring 2018: March 25-29; Pittsburgh, Pennsylvania USA -- Our 100th Year Anniversary Celebration!

Fall 2018: October 14-18 or 21-25, or November 4-8; USA Location (to be determined)

Spring 2019: March 10-14 or 17-21 or 24-28; USA Location (to be determined)

1088 Burrard Street; Vancouver, BC V6Z 2R9 Canada
+1.604.331.1000



IEEE/PES TRANSFORMERS COMMITTEE
Fall 2016 Meeting; Vancouver, British Columbia, Canada
Agenda - General Sessions

Chair: Stephen Antosz **Vice Chair:** Sue McNelly **Secretary:** Bruce Forsyth
Treasurer: Greg Anderson **Awards Chair/Past Chair:** Don Platts **Standards Coordinator:** Jim Graham

Opening Session

Monday, October 24: 8:00 am - 9:15 am

(rosters circulated – attendance required to maintain Member status)

1. Welcome and Announcements Stephen Antosz
2. Meeting Minute Greg Anderson
3. Approval of Agenda Stephen Antosz
4. Approval of Minutes from Spring 2016 Meeting Stephen Antosz
5. Chair's Report & Administrative Subcommittee Report Stephen Antosz
6. Transformers Committee Member vote on O&P and WG P&P Stephen Antosz
7. Vice Chair's Report Sue McNelly
8. Secretary's Report Bruce Forsyth
9. Treasurer's Report Greg Anderson
10. Standards Report Jim Graham
11. Editor's Report Sanjib Som
12. Liaison Representative Reports
 - 12.1. CIGRE Raj Ahuja
 - 12.2. IEC TC-14 Technical Advisor to USNC Phil Hopkinson
 - 12.3. Standards Coordinating Committee, SCC No. 18 (NFPA/NEC) David Brender
 - 12.4. Standards Coordinating Committee, SCC No. 4 (Electrical Insulation) Paulette Payne Powell
13. Hot Topics for the Upcoming Week Subcommittee Chairs
14. New Business & Wrap-up Stephen Antosz

Closing Session

Thursday, October 27; 11:00 am - 12:00 pm

1. Chair's Remarks and Announcements Stephen Antosz
2. Meetings Planning Subcommittee Greg Anderson
3. Reports from Technical Subcommittees (decisions made during the week)
 - 3.1. Dielectric Tests Ajith Varghese
 - 3.2. Distribution Transformers Steve Shull
 - 3.3. Dry Type Transformers Chuck Johnson
 - 3.4. HVDC Converter Transformers & Reactors Mike Sharp
 - 3.5. Instrument Transformers Ross McTaggart
 - 3.6. Insulating Fluids David Wallach
 - 3.7. Insulation Life Sheldon Kennedy
 - 3.8. Performance Characteristics Ed teNyenhuis
 - 3.9. Power Transformers Joe Watson
 - 3.10. Standards Jerry Murphy
 - 3.11. Underground Transformers & Network Protectors Dan Mulkey
 - 3.12. Bushings Peter Zhao
4. Additional Report from Standards Subcommittee (issues from the week) Jim Graham
5. New Business (continued from Monday) and Wrap-up Stephen Antosz

NOW AVAILABLE

Updated IEEE Power, Distribution, & Regulating Transformers Standards 2016 Collection

PDFs on CD-ROM



Features:

- **This IEEE CD-ROM Includes 104 active IEEE Standards,** Guides, and Recommended Practices along with amendments, corrigendum, errata, and interpretations of the IEEE Transformers Committee.
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Special Meeting Pricing:

Fall 2016 Transformers Committee Meeting

October 23-27, 2016
Vancouver, BC Canada

CD-ROM can only be purchased from the on-line meeting registration system. Go to www.transformerscommittee.org, "Next Meeting" page, and purchase while registering for the meeting. Available for purchase with the on-line registration system until October 19, or at the meeting in Vancouver, BC Canada.

IEEE Member: USD \$1,075.00
Non-Member: USD \$1,345.00
Committee Member: US \$965.00
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IEEE Member Price:
USD \$1,213.50
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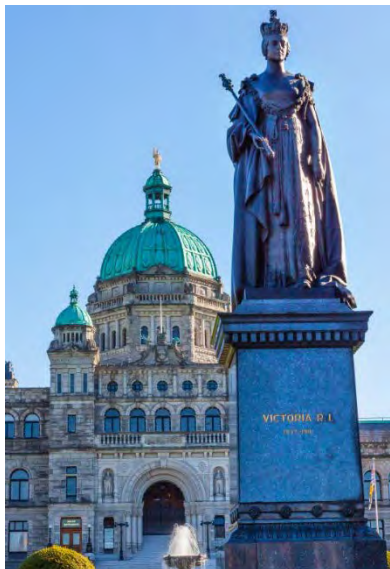
Special pricing is only offered through Transformer Committee meeting registration website.

Contact transformers@ieee.org for more information.

IEEE Power, Distribution & Regulating Transformers Collection: VuSpec™: Contents

Includes the following standards (titles condensed)

IEEE 4™-2012 High-Voltage Testing Techniques	IEEE C57.12.60™-2009 Test proc Therm Eval of Insul. Sys. Dry Coil	IEEE C57.113™-2010 Partial Discharge Measurement
IEC/IEEE 60076-21:2011 (E) Power transformers - Part 21: Req.	IEEE C57.12.60™-2009/Cor 1-2013	IEEE C57.116™-2014 Transf. Connect. to Generators
IEC/IEEE 62032:2012 App., Spec., and Test. Phase Shift Transf.	IEEE C57.12.70™-2011 Term. Mark & Conn Distr. Pwr Transf.	IEEE C57.119™-2001 Temperature Rise Tests
IEC/IEEE 65700-19-03:2014 Bushings for DC application	IEEE C57.12.80™-2010 Term for Pwr & Distr Transf.	IEEE C57.120™-1991 (R2006) Loss Eval for Power Transf. & Reactors
IEEE 259™-1999 (R2010) Eval. Insul. for Dry-Type Specialty rs	IEEE C57.12.90™-2015 Test Code Liquid-Immersed	IEEE C57.121™-1998 Accept & Main. Less Flam Hydrocarb Fluid
IEEE 638™-2013 Class 1E Transf. Nuclear Stations	IEEE C57.12.91™-2011 Test Code for Dry-Type	IEEE C57.123™-2010 Transf Loss Measurement
IEEE 1276™-1997 (R2006) High Temp Insul Mats Liquid-immers	IEEE C57.13™-2016 Req. Instrument Transformers	IEEE C57.124™-1991 Detection of Partial Discharge
IEEE 1277™-2010 Dry & Oil-Reactors for DC Trans.	IEEE C57.13.1™-2006 Field Testing of CTs	IEEE C57.125™-2015 Guide for Failure Investigation
IEEE 1538™-2000 (R2005) Max Winding Temp Rise Liquid-Fill	IEEE C57.13.2™-2005 (R2010) Conform. Test Instrum. Transf.	IEEE C57.127™-2007 Guide Detection Partial Discharges
IEEE 1538a™-2015 Max Winding Temp Rise Liquid	IEEE C57.13.3™-2014 Grounding of Instrum. Transf.	IEEE C57.129™-2007 HVDC Converter Transformers
IEEE C57.12.00™-2015 Gen Req for Liquid-Immersed	IEEE C57.13.5™-2009 Performance Instrum. Transf.	IEEE C57.130™-2015 DGA Factory Temp. Rise Tests
IEEE C57.12.01™-2015 Solid-Cast Resin-Encapsulate	IEEE C57.16™-2011 Dry-Type Air-Core Reactors	IEEE C57.131™-2012 Requirements for Tap Changers
IEEE C57.12.10™-2010 Req for Liquid-Immersed	IEEE C57.17™-2012 Arc Furnace Transformers	IEEE C57.134™-2013 Determination of hottest-Spot
IEEE C57.12.10™-2010 Errata	IEEE C57.18.10™-1998 (R2003) Semic. Rectifier Transf.	IEEE C57.136™-2000 (R2005) Sound Level Abatement & Determ.
IEEE C57.12.10™-2010/Cor 1-2012	IEEE C57.18.10™-1998 (R2003) Errata	IEEE C57.138™-1998 (R2005) Routine Inpulse Test
IEEE C57.12.10™-2010/Cor 2-2013	IEEE C57.18.10a™-2008 Amendment 1	IEEE C57.139™-2015 Dissolved Gas Analysis
IEEE C57.12.20™-2011 Overhead Distribution Transf.	IEEE C57.19.00™-2004 (R2010) Pwr App Bushings	IEEE C57.140™-2006 Eval & Recondi. Of Liquid Imm. Pwr Transf.
IEEE C57.12.23™-2009 Submersible Single-Phase	IEEE C57.19.00™-2004 Interpretation	IEEE C57.142™-2010 Occurrence & Mitigation of Switching Transients
IEEE C57.12.24™-2009 Submersible, Three-Phase	IEEE C57.19.00™-2004 Errata	IEEE C57.143™-2012 Monitoring Equip. Liq. Trans.
IEEE C57.12.28™-2014 Pad-Mtd Enclosure Integrity	IEEE C57.19.01™-2000 (R2005) Dimen. Outdoor Bushings	IEEE C57.144™-2004 Metric Conversion of Transf
IEEE C57.12.29™-2014 Pad-Mtd End Integ Coastal	IEEE C57.19.01™-2000 (R2005) Interpretation	IEEE C57.146™-2005 Interpre of Gases Gen. Silicone Immer.
IEEE C57.12.30™-2010 Pole Mtd End Integ Coastal	IEEE C57.19.100™-1995 Appl. Apparatus Bushings	IEEE C57.147™-2008 Acceptance & Main. Of Natural Ester Fluids
IEEE C57.12.31™-2010 Pole-Mtd Enclosure Integrity	IEEE C57.21™-2008 Test Code for Shunt Reactors	IEEE C57.148™-2011 Control Cabinets for Power Transformers
IEEE C57.12.31™-2010/Cor 1-2014	IEEE C57.32™-2015 Neutral Grounding Devices	IEEE C57.149™-2012 FRA for Oil-Immerse. Trans.
IEEE C57.12.32™-2002 (R2008) Submersible End Integrity	IEEE C57.91™-2011 Loading Oil-Immersed Transf.	IEEE C57.150™-2012 Transportation of Transformers
IEEE C57.12.34™-2015 Pad-Mtd 3-Phase Distribution	IEEE C57.93™-2007 Install. Liquid-Immers. Transf.	IEEE C57.152™-2013 Diagnostic Field Testing
IEEE C57.12.35™-2013 Bar Coding	IEEE C57.94™-2015 Install. Dry-Type Transformers	IEEE C57.153™-2015 Paralleling Regulating Transformers
IEEE C57.12.36™-2007 Req Distribution Sub Transf.	IEEE C57.96™-2013 Loading Dry-Type Transformers	IEEE C57.154™-2012 Liquid Tran. High-Temp. Insul.
IEEE C57.12.37™-2015 Electronic Report Test Data	IEEE C57.98™-2011 Transformer Impulse Tests	IEEE C57.155™-2014 Interp. of Gases Ester Immers. Trans.
IEEE C57.12.38™-2014 Pad-Mounted Single-Phase	IEEE C57.100™-2011 Thermal Eval. Liquid Transf.	IEEE C57.157™-2015 Life Tests Sw. Contacts Trans.
IEEE C57.12.40™-2011 Network Transformers	IEEE C57.104™-2008 Gases in Oil-Immers. Transf.	IEEE C57.163™-2015 Transformer Cap. under GMD
IEEE C57.12.44™-2014 Secondary Network Protectors	IEEE C57.105™-1978 Connect. 3-Phase Distribution	IEEE C57.637™-2015 Reclamation of Min. Oil and use
IEEE C57.12.51™-2008 Vent. Dry-Type Pwr Transf.	IEEE C57.106™-2015 Acceptance of Insulating Oil	
IEEE C57.12.52™-2012 Sealed Dry Pwr. Tran., Gen. Req.	IEEE C57.109™-1993 (R2008) Through-Fault-Current Duration	
IEEE C57.12.58™-1991 (R2008) Conducting Transient Voltage	IEEE C57.110™-2008 Supplying Nonsinusoidal Load	
IEEE C57.12.59™-2015 Dry-Type Transf Fault Current Duration	IEEE C57.111™-1989 (R2009) Silicone Insulating Fluid Transf.	
	IEEE C57.111™-1989 Interpretation	



Due to the anticipated large response and seating limitations at the restaurant, we have divided this into two tour routes: Tour 1A and Tour 1B. During the on-line meeting registration process, you will likely have the opportunity to choose between tour routes. Each full day tour starts with a 90-minute ferry ride through the scenic Gulf Islands to Vancouver Island's city of Victoria. Upon landing in Victoria, one bus will head to lunch (Tour 1A) and the other two buses (Tour 1B) make their way to Butchart Gardens to admire the floral splendors and ancient trees. www.butchartgardens.com

ALL guests will enjoy lunch at the beautiful Vista 18 with views of the Inner Harbour. www.vista18.com After lunch, take time to explore the area's attractions before departing on either the bus to Butchart Gardens (Tour 1A) or the ferry adventure back to Vancouver (Tour 1B). Attractions within the Inner Harbour include the world famous Fairmont Empress Hotel, British import shops, Parliament buildings and Royal British Columbia Museum. www.royalbcmuseum.bc.ca

Tours 1A and 1B include:

- Private motor coaches with restrooms
- Admission to Butchart Gardens
- Buffet lunch at Vista 18* — soup, salad, entrée choices, dessert, coffee, tea, water
- Commentated sight-seeing tour throughout the day (on ferries and buses)
- Bottled water
- Gratuities

** Please advise of any special dietary needs at registration.*

Itineraries (times are approximate):**TOUR 1A (50 person limit/1 bus)**

7:15 am: Depart on buses from Sheraton
8:15 am: Arrive at BC Ferries
9:00 am: Ferry ride to Victoria
10:30 am: Ride buses to Vista 18
11:15 am: Lunch at Vista 18
12:30 pm: Explore Victoria
2:00 pm: Ride buses to Butchart Gardens
2:30 pm: Arrive at Butchart Gardens
4:00 pm: Ride buses back to ferry terminal
5:00 pm: Ferry ride to Vancouver
6:30 pm: Ride buses to hotel
7:30 pm: Arrive back at Sheraton

TOUR 1B (100 person limit/2 buses)

7:15 am: Depart on buses from Sheraton
8:15 am: Arrive at BC Ferries
9:00 am: Ferry ride to Victoria
10:30 am: Ride buses to Butchart Gardens
11:15 am: Arrive at Butchart Gardens
12:30 pm: Ride buses to Victoria
1:00 pm: Lunch at Vista 18
2:30 pm: Explore Victoria
4:00 pm: Ride buses back to ferry terminal
5:00 pm: Ferry ride to Vancouver
6:30 pm: Ride buses to hotel
7:30 pm: Arrive back at Sheraton

NOTE: These tours will NOT return in time to also attend the Early Bird Event #2 at the Comedy Mix on Saturday evening.

Attendance extremely limited ... REGISTER EARLY!



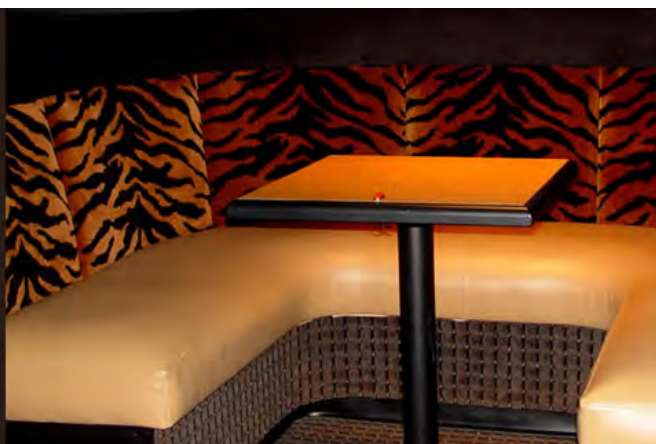
EARLY BIRD EVENT #2
Saturday, October 22, 2016



Comedy Club at Century-Plaza Hotel

the Comedy MIX

Our casual evening entertainment takes place at the Comedy Mix, located in the Century-Plaza Hotel & Spa, directly across the street from the Sheraton Wall Centre. This vibrant lounge lures locals and tourists alike with laughs, showcasing local & touring stand-up comedians. Guests will be treated to heavy appetizers before the show. Cash bar available.



Registration fee includes admission to the comedy show with reserved seating, appetizers prior to the show with cash bar, all taxes and gratuities.

Itinerary

- 6:20 pm: Meet in hotel lobby to walk to Century-Plaza Hotel (located across the street from Sheraton Wall Centre)
- 6:45 pm: Reception with appetizers and cash bar (credit cards accepted at bar)
- 8:00 pm: Comedy show begins!
- 10:00 pm: Return to hotel

NOTE: The all-day Vancouver/Victoria tour will NOT return in time to also attend this event on Saturday evening.

Appetizer Menu

Please advise of any special dietary needs at registration.

- Salad roll
- Spicy fries
- Chicken wings and strips
- Nachos and popcorn
- Pulled pork sandwich and fries
- New York style cheesecake





SPOUSE/COMPANION TOUR Monday, October 24, 2016

Sea to Sky Tour



For this breathtaking tour, guests will travel along the world famous “Sea to Sky Highway,” rated as one of the most scenic highways in the world. First stop for the day is Shannon Falls, one of North America’s highest waterfalls with a vertical drop of over 1,000 feet!

Next stop is the spectacular Sea to Sky Gondola, located in the community of Squamish in the heart of the world famous Sea to Sky Corridor. www.seatoskygondola.com A 10-minute gondola ride takes guests to the summit of Mount Habrich, with its stunning views of the coastal mountain range, Stawamus Chief and Howe Sound, where the ocean meets the mountains. A delicious lunch will be served at Summit Lodge, overlooking the Sound. Time is available before and after lunch to explore the summit. On the way back to the hotel, the tour stops one last time at beautiful Horseshoe Bay with ample opportunity to enjoy this beautiful coastal town.

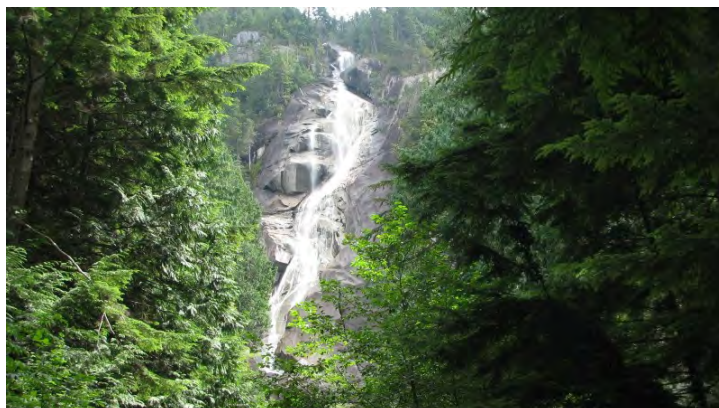
Itinerary (times are approximate)

- 9:15 am – Depart on buses from Sheraton
- 10:00 am – Arrive at Shannon Falls
- 10:30 am – Ride bus to Sea to Sky Gondola
- 10:40 am – Ride gondola and explore the summit
- 12:00 pm – Buffet lunch* at Summit Lodge
- 1:30 pm – Ride bus to Horseshoe Bay
- 2:15 pm – Arrive at Horseshoe Bay
- 3:00 pm – Depart Horseshoe Bay for hotel
- 3:30 pm – Arrive back at Sheraton

** Please advise of any special dietary needs at registration.*

Buffet Lunch Menu

- Caesar salad with lemon garlic dressing, herb croutons and shaved cheese
- Pasta salad with roasted squash, peppers, roasted cherry tomatoes, spinach, capers, garlic, olives, pesto dressing
- Roast beef sandwich on marble rye bread with horseradish mayonnaise, greens and tomato
- Turkey and ham sandwich on ciabatta with mayonnaise, greens and tomato
- Vegetarian sandwich on herb focaccia with hummus, grilled vegetables, feta and marinated mushrooms
- Fruit platter with yogurt dip; platter includes honeydew melon, cantaloupe, pineapple and assortment of berries
- Choice of non-alcoholic beverage



Attendance limited ... REGISTER EARLY!





SPOUSE/COMPANION TOUR Tuesday, October 25, 2016 Vancouver City Tour



An enjoyable tour that promises a diverse and interesting sample of the city's sights! The day begins with a drive through the world famous Stanley Park, a forest set in the heart of downtown. The Park's scenic drive includes Lost Lagoon, a stop at the Totem Poles, Prospect Point and Brockton Oval. www.tourismvancouver.com/activities/stanley-park



The day continues with a beautiful drive along Vancouver's coastline and beaches, en route to the University of British Columbia's Museum of Anthropology. Professional guides will be available to take guests on an informative walk through the Museum and nearby grounds. www.moa.ubc.ca

After the Museum, guests travel to the famous Seasons in the Park restaurant for a memorable three course lunch. www.vancouverdine.com/seasons After lunch, take time to explore and enjoy Queen Elizabeth Park's sunken gardens. Other tour highlights include a ride through exotic Chinatown, the third largest Chinatown by population in North America, and nearby Gastown with its quaint cobblestone streets, steam clock and unique shops all housed in turn-of-the-century buildings. www.gastown.org



Itinerary (times are approximate)

- 9:15 am – Depart on buses from Sheraton
- 9:30 am – Arrive at Stanley Park for ride-through tour
- 10:30 am – Arrive at Museum of Anthropology and explore
- 12:30 pm – Ride bus to Seasons in the Park
- 1:00 pm – Enjoy lunch* at Seasons in the Park
- 2:00 pm – Ride bus to Queen Elizabeth Park and explore gardens
- 3:15 pm – Depart on bus for ride through Chinatown and Gastown
- 3:45 pm – Arrive back at Sheraton

** Please advise of any special dietary needs at registration.*

Lunch Menu (first, second and third course choices noted below – place order on day of tour)

- Caesar salad with romaine lettuce, parmesan cheese and crispy capers OR Wild mushroom soup with truffle oil
- Seafood linguine carbonara with bacon, prawns, fresh fish and scallops OR Grilled chicken, french fries and market vegetables
- Chocolate truffle cake with raspberry coulis OR Crème brûlée with pecan biscotti
- Coffee, tea and iced tea

Attendance extremely limited ... REGISTER EARLY!





DINNER SOCIAL
Wednesday, October 26, 2016
Dinner Cruise Aboard MV Britannia



Watch the unmatched beauty of Vancouver's skyline on this elegant sunset cruise. A hostess will welcome guests to the boat while live music sets the stage for the dinner ahead.

The sun setting over the Pacific Ocean forms an awe-inspiring backdrop as we cruise Vancouver Harbour: around Stanley Park, underneath the Lions Gate Bridge and past the beaches of English Bay with the North Shore mountains in the background. Take in the sights and sounds of the city while indulging in a freshly prepared gourmet dinner inspired by West Coast cuisine.



Itinerary

- 5:45 pm – Buses begin loading in front of hotel with staggered departures for MV Britannia (approximately 1 mile)
- 6:30 pm – Last bus departs for MV Britannia
- 6:30 pm – Begin boarding MV Britannia; enjoy appetizers and cash bar
- 7:00 pm – Embark on harbour cruise
- 7:30 pm – Buffet dinner
- 10:00 pm – Arrive back at Sheraton (*return time is approximate*)

Reception/Dinner Menu

Appetizers (upon boarding): Mini Jamaican Jerk Chicken Skewers, Cambozola Cheese and Sun-Dried Cranberry Toasts, Pacific Crab Cakes with Cajun Aioli, Coconut-Crusted Tiger Prawns with Sweet Chili Dip, Roasted Garlic and Tomato Crostini

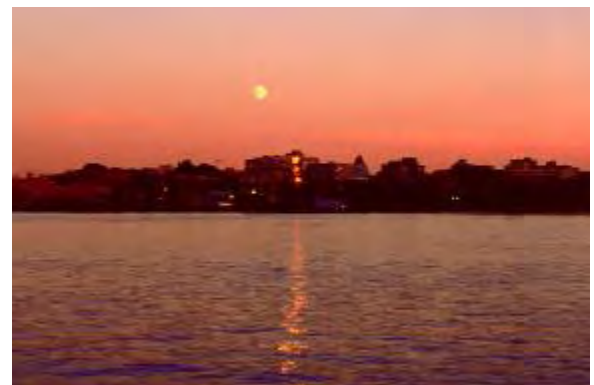
Buffet Dinner: California Salad Basket with Roasted Red Peppers, Fruits & Raspberry Dressing; Edamame Bean Salad with Chickpeas and Roasted Garlic Dressing; Quinoa Salad with Cucumber, Celery, Red Pepper and Lime/Chili Dressing and Baskets of Panini Bread Rolls and Butter; Roasted Garlic Mashed Potatoes and Roasted Market Fresh Vegetables.

Choice of 3 Entrées: Slow Roasted Sirloin of Beef with "Au Poivre" Sauce (sliced at the buffet with a creamy classic black peppercorn sauce); Roasted Chicken Breast with Fresh Ginger and Scallions (in a light au jus with fresh ginger); Fresh BC Salmon Filet (in chef's light broth of tomato, scallions and garlic); Vegetarian Option Available Upon Request (please advise at time of registration)

Dessert: Chocolate Decadence Cake, Fresh Fruit and Berry Platters, New York Style Cheesecake

Beverages: Freshly Brewed Coffee & Teas

Cash Bar: Credit cards will be accepted for bar tabs during the reception and dinner.



Attendance limited ... REGISTER EARLY!





Technical Tour – Monday, October 24, 2016

The IFD team is pleased to welcome IEEE delegates and their spouses/companions on a technical tour of our Vancouver facility on Monday, October 24, 2016.

Internal fault detection improves line technician safety and reduces the duration and frequency of power outages.

The IFD sensor focuses on providing a lifetime of reliable ‘actionable’ information on the status of your distribution transformer.

Please join our tour team and discover how the IFD team strives to be your best supplier!



Itinerary

- 6:30 pm - Buses depart Sheraton Hotel
 - Self-guided tour through Engineering, Operations and Manufacturing (virtual visit)
 - Refreshments and dinner will be served
- 10:00 pm - Buses return to Sheraton Hotel

**** Space is limited to 100 people ****

**** Please wear your IEEE Transformers Committee meeting name badge during the tour ****

**** Spouses / Companions are welcome ****

Please inform us of any dietary restrictions when you register for the tour.

Indicate your desire to attend the IFD tour when registering for the IEEE Transformers Committee meeting.



Technical Tour – Tuesday, October 25, 2016

TRIUMF is home to the world's largest cyclotron particle accelerator, energetic isotope beams and a host of nuclear health facilities. Guests are taken on top of the cyclotron and through experimental buildings by real students and researchers. Expect to get an inside look at what the lab is really like!

Itinerary

7:00 pm - Buses depart Sheraton Hotel
10:00 pm - Buses Return to Sheraton Hotel
~ DINNER ON YOUR OWN ~



Safety information

Footwear & Attire

Closed toe shoes with a low/no heel are required footwear on the tour route and in non-office areas within the TRIUMF perimeter fence. Guests are encouraged to wear long pants as the tour route involves walking over grated floors and stairs. Large bags/knapsacks are NOT permitted on the tour route.

Implanted Medical Devices

Prior to visiting TRIUMF, all prospective guests with an implanted medical device should visit their doctor to **obtain documentation on the magnetic and electric field sensitivity of their device.**

**** Space is limited to 100 people ****

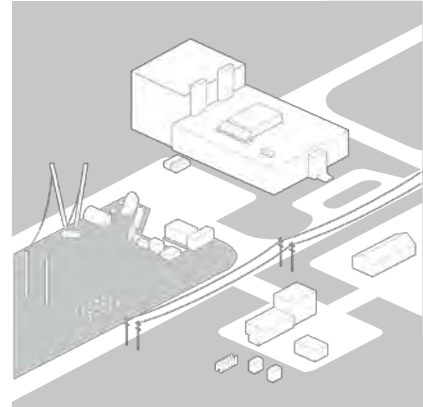
**** Please wear your IEEE Transformers Committee meeting name badge during the tour ****

**** Spouses / Companions are welcome ****

**\$15.00 CAD fee per person
(paid with IEEE registration)**

**Indicate your desire to attend the TRIUMF tour when registering for the
IEEE Transformers Committee meeting.**

Technical Tour – Thursday, October 27, 2016



Itinerary

- 12:30 pm - Bus departs Sheraton Hotel
(box lunch provided)
- 1:30 pm - Tour begins
- 3:00 pm - Light refreshments
- 5:00 pm - Bus returns to Sheraton Hotel



Powertech (www.powertechlabs.com) is a wholly owned subsidiary of BC Hydro and provides research and development, consulting, equipment testing and evaluation, condition assessment, asset management, power system analysis and software development to support the power utility industry, equipment manufacturers and other industries, such as automotive. For over 30 years, our engineers, technologists and scientists have provided clients with a qualified, diversified and value added, one-stop solution to electrical, mechanical, materials, civil, chemistry, non-destructive testing and inspection services.

As a multidisciplinary testing, research and development facility, we have 19 different laboratories situated on 11 acres in Surrey, British Columbia. We pride ourselves on being one of the largest testing, research and development facilities in North America, supporting large utilities, electric manufacturers and automotive original equipment manufacturers (OEM) with specialized testing, qualification and non-standard testing for North American and international standards.

**** Space is limited to 50 people ****

**** Please wear your IEEE Transformers Committee meeting name badge during the tour ****

**** Spouses / Companions are welcome ****

Please inform us of any dietary restrictions when you register for the tour.

Indicate your desire to attend the Powertech tour when registering for the IEEE Transformers Committee meeting.



Changes & Additions to C57.12.00 and C57.12.90 in the 2015 Revisions

-- Technical Presentation --
Thursday, October 27, 2016

by Stephen Antosz and Steven Snyder

1. Abstract

The presentation will cover three main topics:

1. Overview of the continuous revision process as it pertains to IEEE Standards C57.12.00 and C57.12.90.
2. Significant revisions to IEEE Standard C57.12.00-2015, IEEE Standard for General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers.
3. Significant revisions to IEEE Standard C57.12.90-2015, IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers.

To open the presentation, Steve Snyder will discuss the continuous revision process, clarifying the role of the Standards Subcommittee with respect to the various subcommittees that provide technical expertise and material for the revised standards. C57.12.00 and C57.12.90 are unique in the sense that they are "base standards", which the product standards build upon, undergoing continuous review and revision. C57.12.00 and C57.12.90 are also considered "companion standards": C57.12.00 sets the performance requirements, and C57.12.90 defines the test requirements and procedures necessary to meet C57.12.00.

Engineering expertise resides in the various subcommittees, such as: Performance Characteristics, Dielectric Tests, Insulation Life, Insulating Fluids, and Distribution Transformers. Work flow begins in individual Task Forces (TF), progresses up through the various subcommittees, and finally is collected by the Standards Subcommittee for inclusion in a document's revision ballot. A new revision is considered when enough new material is collected to warrant a revision ballot, generally about a 5-year cycle. The PAR for the revision work exists in the associated Working Group (WG) within the Standards Subcommittee.

As WG Chair of C57.12.00, Steve Snyder will present the changes that occurred in this standard for the 2015 edition.

As WG Chair of C57.12.90, Steve Antosz will present the changes that occurred in this standard for the 2015 edition.

2. Learning Objectives

This presentation will help users of these two “base” standards understand the new requirements implemented in this revision cycle.

3. Learning Outcomes

As a result of attending this tutorial session, members will gain an understanding of the following:

- The process of "how" standard revisions are proposed, vetted, and ultimately adopted.
- The significant changes in the 2015 revisions of standards C57.12.00 and C57.12.90.
- The rationale for those changes.

4. Presenters' Biographies

Stephen (Steve) Antosz is President of Stephen Antosz & Associates, Inc. This transformer consulting firm provides engineering services to utility and industrial users of power transformers for shell-form and core-form, new and existing units. Areas of focus are: specification development, bid evaluation, design review, factory inspection, test witness, field inspection, and failure analysis. Prior to starting his own firm in 2010, Steve worked for 22 years as a technical and commercial manager in various segments of the power transformer industry. He began his career as a transformer design engineer, rose through the ranks as a transformer specialist for several well-known companies, and is familiar with a range of transformer technologies. Steve earned a BS degree in Electrical Engineering and an MBA degree. He is currently Chairman of the IEEE/PES Transformers Committee and a member of several working groups and subcommittees of the Committee.

Steven L. Snyder is the Manager of Engineering, High Voltage Instrument Transformers, North America, for ABB Inc. In this position, he oversees all the engineering efforts for these North American product lines, including both production and R&D projects. Over a career spanning 38 years, he has worked in a variety of capacities for McGraw-Edison, Cooper Industries, Kuhlman Electric, and ERMCO, with engineering and R&D experience in distribution and substation equipment. Steve has been an active IEEE member for 35 years, active with the Transformers Committee since 1995, and is presently a member of several working groups and subcommittees. He is a 1978 graduate of the University of Cincinnati with a BS degree in electrical engineering technology.



Tacit Knowledge Capture and Brain-Drain at Electric Utilities, an IEEE Perspective

-- Technical Presentation --
Thursday, October 27, 2016

by Dr. Nick Perjanik and Mr. Alwyn VanderWalt

1. Abstract

As a consequence of an aging workforce, electric utilities are at risk of losing their most experienced and knowledgeable electrical engineers. This presentation will address what electric utilities are doing to capture the tacit knowledge or know-how of these engineers. The presentation will include the experiences of a U.S. utility, their recognition of the potential risk, and their timely actions to address the issue. This presentation focuses on a qualitative research study that explored the tacit knowledge capture strategies currently used at seven U.S. electrical utilities which have demonstrated an industry commitment to improving operational standards.

The presentation is provided in three parts. In the first section, Dr. Perjanik will introduce the study and provide a brief overview of the Brain-Drain topic within the electrical utility industry. The problem and significance of the issue to electrical engineers and utilities will be provided. Mr. VanderWalt will then offer a utility's perspective of the issue and what steps a U.S. utility has been taking to identify this risk, implement strategies to reduce it, and ensure operational stability. In the final section, the results of the study will be provided to the members as strategic tools to implement within their own electrical engineering departments or organizations.

2. Learning Objectives

This presentation will help engineers understand the real benefits, challenges, and risks associated with capturing the experience-based knowledge of senior and retiring engineers. It will provide electrical engineering departments and organizations with tools to capture this knowledge before it "walks out the door". The experience and identification of knowledge capture strategies currently used in the industry provides members with timely information needed to ensure operational continuity and maintain organizational assets.

3. Learning Outcomes

As a result of attending this presentation, participants will gain an understanding of:

- The current "Brain-Drain" and its relevance to the electrical utility industry.
- Knowledge management practices, leadership, culture, and hoarding issues experienced within electrical engineering departments at U.S. utilities.

- The operational challenges and best practices experienced at seven U.S. electrical utilities.
- What ten tacit knowledge capture strategies electric utilities are implementing to capture the tacit knowledge or know-how of senior engineers, to ensure operational continuity in the delivery of safe, reliable, and sustainable power.

4. **Presenters' Biographies**

Nick Perjanik, Ph.D., MBA is the Manager of Knowledge Services for WEIDMANN Electrical Technology. Nick has 18 years of laboratory and management experience with the diagnostic testing of electrical insulating fluids and materials and the global education and training of condition based maintenance and monitoring programs. He began his career as an analytical chemist with Analytical Associates, Inc. in 1987, and became the general manager of Analytical ChemTech International, Inc. (ACTI) in 1995. Prior to being acquired by WEIDMANN Diagnostic Solutions, Inc. in 2000, Nick expanded ACTI to five laboratories in the U.S. and Canada and wrote several technical papers. Nick joined WEIDMANN Electrical Technology in 2011 and is currently responsible for information and knowledge services. He received his Bachelor's degree in Chemistry and his Master's degree in Business Administration from California State University, Sacramento, and earned a Ph.D. in Management in 2016, with studies in applied management and decision sciences from the School of Management and Technology at Walden University. Nick is a member of the ASTM D-27 Technical Committee on Electrical Insulating Liquids and Gases, the CIGRE WG47 on DGA, and is an Active Participant of the IEEE Transformers Committee.

Alwyn VanderWalt was born and raised in South Africa, where he received a Bachelor's degree in Electrical Engineering in 1989 before starting his engineering career with Eskom as a protection engineer. While working for Eskom, he received a Master's degree in Engineering Management. In 1997 he immigrated to the USA with his family, where he continued his career in the utility industry as an electrical engineer with Texas New Mexico Power Company, based in Silver City, New Mexico. He became interested in power transformers as a result of having to investigate a few transformer failures, and subsequently being involved with the replacement of those transformers. He has been involved with the specification, purchasing, testing and maintenance of transformers in one way or another ever since. In 2004 he accepted a position with PacifiCorp in Salt Lake City where he remained involved with transformers as part of his duties. On behalf of PacifiCorp, he attended numerous manufacturer production inspections throughout the world. In addition to being a key participant involved with updating PacifiCorp's transformer purchase specifications, he was responsible for or involved with creating, revising and updating all of their substation equipment installation and maintenance procedures. He started attending the IEEE Transformers Committee meetings in 2013, and has been an Active Participant since, most recently assuming the role of Vice Chair of WG C57.93. At the end of 2014, he moved back to New Mexico, accepting a position with Public Service Company of New Mexico, where he serves in his current role as Director of Protection and Control Engineering, and Substation and Meter Operations.