

Time	Tuesday, Oct 18, 2016		Room	
06:30	18:00	Registration	Regency Foyer	
06:30	08:00	Breakfast	Regency Foyer/Balmoral	
07:00	16:00	Speaker Ready Room	King George	
08:00	09:00	Opening Plenary Moderator - Ms. Kirsten Peck (BC Hydro) (Keynote Speakers: Greg Reimer BC Hydro and Dr. Mani Venkata (Affiliate Professor, Dept of EE, Univ of Washington))	Regency D,E,F	
09:00	09:30	Networking Break	Regency Foyer/Balmoral	
Parallel Technical Sessions - Track 1 (REGENCY E, F)				
		Session 1 - Reliability and Asset Management Chair: Jim Papadoulis	Presenter	
09:30	09:50	724: Vulnerability of Sound Barrier Enclosure to Failure of Large Auto Transformer	Ibrahim Hathout (Hydro One Inc.)	
09:50	10:10	773: Application of Unmanned Aircraft Systems (UAS) in Transmission Line Inspection	Alex Babakov (Powertech Labs Inc.)	
10:10	10:30	745: Comparison of Different Approaches for Estimating Condition of Transmission Line Conductors	Yury Tsimberg (Kinectrics) on behalf of CEATI International	
Networking Break				
10:30	11:00	Regency Foyer/Balmoral		
		Session 2 - Emerging Technologies for Power System Applications Chair: Ed Burt	Presenter	
11:00	11:20	783: A major SVC upgrade in the Canadian 735 kV transmission system	Etienne Veilleux (ABB Inc)	
11:20	11:40	766: The Application of Volt/Var Optimisation on ESKOM South Africa Distribution Feeder	Innocent Davidson (Durban University of Technology)	
11:40	12:00	814: Analyses of Transient Stability Enhancement of Power Systems using VSC Systems	Sakthivel Arunprasanth (RTDS Technologies Inc)	
Lunch				
12:00	13:15	Regency Foyer/Balmoral		
		Session 3 - Digital Protection, Automation, and Cyber Security Chair: Dr. Sudhakar Cherukupalli	Presenter	
13:15	13:35	778: Reliable and interoperable digital substation	Peter Rietmann (ABB Inc.)	
13:35	13:55	793: One box protection system for small and medium sized substation	Stefan Flemming (Siemens Canada)	
13:55	14:15	790: Substation Digital Data Acquisition using Merging Units – Choice of Architecture	Farnoosh Rahmatian (NuGrid Power Corp)	
Networking Break				
14:15	14:45	Regency Foyer/Balmoral		
		Session 4 - Power System Modelling, Analyses and Power Quality Chair: Terry Martinich	Presenter	
14:45	15:05	733: HVDC Grid Power Flow Controller Using Dynamic Droop Control Method	Zheng Zhao (University of British Columbia)	
15:05	15:25	771: Power system transients analysis based on rotational invariance technique	Marc-Antoine Durand (Université du Quebec à Trois Rivières)	
15:25	15:45	754: Dynamic Models for Electric Power Systems in Renewable Integration Studies	Khosro Kabiri (Powertech Labs) on behalf of CEATI International	
15:45	16:05	784: Dynamic modelling of STATCOMs and Hybrid STATCOMs for transmission applications	Etienne Veilleux (ABB Inc)	
16:05	16:25	801: Phasor Based Impedance Scan and Filter Performance Assessment versus Electromagnetic Transient Approach	Sameh Kodsı (Teshmont Consultants LP)	
16:25	16:45	815: Suppressing Wind Farm Output Power Fluctuation and Improving Power System Stability Using Battery Energy Storage System	Ashraf Ul Haque (Teshmont Consultants LP)	
		CIGRÉ PANEL #1 – VISION OF FUTURE POWER SYSTEMS Chair: Dr. Sudhakar Cherukupalli Panelists: 1: Kip Morison (BC Hydro) 2. Kenan Ogelmann VP-Technology ERCOT (Energy Regulatory Commission of Texas), 3. Mike Ross (American Superconductors) Three panelists with a 15 min Q+A Session		Regency E F
17:00	18:00			
18:00	19:00	Poster Sessions & Cocktail Reception	Regency Foyer North and South	
19:00	22:00	Conference Banquet	Regency D E F	
Exhibitors Trade Show open from 9:00 am to 4:00 pm and 5:30 to 7:00 pm (Exhibition located in 2E & 2F (2nd floor))				

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09:00	09:30	Networking Break	Regency Foyer/Balmoral
Parallel Technical Sessions - Track 2 (Regency D)			
		Session 5 - Power System Modelling, Analyses and Power Quality Chair: Jorge Hollman	Presenter
09:30	09:50	805: Geomagnetically Induced Currents, their True Impact, and Methods to Protect Against	Ed Nyenhuis (ABB Inc.)
09:50	10:10	803: Techniques for Studying the Harmonic Impacts of Wind Farm Interconnection	Tim Freiberg (AMSC)
10:10	10:30	765: Methods to Improve the Grid Resiliency under the Influence of GIC	Johannes Raith (Siemens AG , Austria)
Networking Break			
10:30	11:00	Networking Break	
		Session 6 - Interconnection of Non-dispatchable Generation Into Grids Chair: Irfan Elahi	Presenter
11:00	11:20	816: Managing Renewable Generation Efficiently with a Receding Horizon Optimization	Alberto Lamadrid (Lehigh University)
11:20	11:40	736: An Innovative Application of PMUs for Generation Shedding	Saeed Arabi (Powertech Labs Inc.)
11:40	12:00	804: Operational Experiences with Electricity Generation from Wind Energy Converters in Challenging Cold Climate Conditions	Patrice Godin (ENERCON Canada Inc.)
Lunch			
12:00	13:15	Lunch	
		Session 7 - Reliability and Asset Management Chair: Dr. Mukesh Nagpal	Presenter
13:15	13:35	744: Methodology and Case Study for Circuit Breaker Economic End-of-Life Assessment	Brent Jorowski (Manitoba Hydro)
13:35	13:55	726: A Novel Built-In Insulation Condition Monitoring System Enabled by Dry Type Technologies	Robert Middleton (RHM International)
13:55	14:15	809: Condition Monitoring - Data Driven and Knowledge Based Analyses	Tony McGrail (Doble Engineering)
Networking Break			
14:15	14:45	Networking Break	
		Session 8 - Digital Protection, Automation, and Cyber Security Chair: Dr. Muhammad Arshad	Presenter
14:45	15:05	764: Teleprotection ensuring highest performance of the protection system using packet switched wide area networks	Ramon Bächli (ABB)
15:05	15:25	791: Design, concept and cost of a IEC61850 Process Bus based Breaker Fail, Synchronism Check and Trip Coil Monitoring Application	Stefan Flemming (Siemens Canada)
15:25	15:45	795: BC Hydro Synchrophasor System for Wide Area Monitoring, Protection and Control – Functional Requirements and System Architecture	Farnoosh Rahmatian (NuGrid Power Copr)
15:45	16:05	776: Access control: from default local device access levels to centralized managed role-based access control	Peter Rietmann (ABB Inc.)
16:05	16:25	812: Development of a Virtual Model of a Sub Harmonic Protection Relay	Nuwan Perera (Protection Design)
16:25	16:45	774: Providing Secure Multi-Vendor Device Management in a Vendor-Centric World	Derrick Mack (SUBNET Solutions Inc)
		CIGRÉ PANEL #1 – VISION OF FUTURE POWER SYSTEMS Chair: Dr. Sudhakar Cherukupalli Panelists: 1: Kip Morison (BC Hydro) 2. Kenan Ogelmann VP-Technology ERCOT (Energy Regulatory Commission of Texas), 3. Mike Ross (American Superconductors) Three panelists with a 15 min Q+A Session	
17:00	18:00	Track 2 - Regency D	
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18:00	19:00	Regency Foyer North and South	
19:00	22:00	Conference Banquet	
		Regency D E F	

Time	Wednesday, Oct 19, 2016		Room
06:30	18:00	Registration	Concourse (2 nd Floor)
06:30	08:00	Breakfast	2G & 2H (2 nd Floor)
07:00	16:00	Speaker Ready Room	Cecil Richards Suite (2 nd Floor)
08:00	09:00	CIGRÉ PANEL #2 – DIAMOND SPONSORS PLENARY What is Network Resiliency? Panel Chair: Dr. Mukesh Nagpal 1. Marc Brunet-Watson (PSC Consulting), 2. Steve Kunsmann (ABB), 3: Richard Wunderlich (Siemens)	Presentation Theatre (2 nd floor)
09:00	09:30	Networking Break	2G & 2H
Parallel Technical Sessions - Track 3 (Presentation Theatre (2nd floor))			
		Session 9 - Seismic Vulnerability Assessment of Power Equipment Chair: Dr. Muhammad Arshad	Presenter
09:30	09:50	808: Connecting Asset Health Indices, Asset Probability of Failure, and Risk	Tony McGrail (Doble Engineering)
09:50	10:10	759: Seismic considerations for Electrical, Protection and Control Equipment in Generating Station	Denis Clement (BC Hydro)
10:10	10:30	762: Seismic considerations for Electrical, Protection and Control Equipment in Generating Station	Amandeep Singh Sal (Power Grid Corporation)
			Track 3: Regency E F
10:30	11:00	Networking Break	Regency Foyer/Balmoral
		Session 10 - Power System Modelling, Analyses and Power Quality Chair: Jose Marti	Presenter
11:00	11:20	810: Optimal Sizing of Energy Storage Capacity for a Wind Power Generator to Improve Loss of Load Probability	Bharath Kumar (KL University)
11:20	11:40	779: Carrier Ethernet Technology in Electrical Utility Communications	Roland Cooke (Bonneville Power Administration)
11:40	12:00	727: Voltage fluctuation caused by transient clouds in the distribution system with high level of PV installation	Alex Mogilvesky (CEATI International)
			Track 3: Regency E F
12:00	13:15	Lunch	Regency Foyer/Balmoral
		Session 11 - Emerging Technologies for Power System Applications Chair: Ed Burt	Presenter
13:15	13:35	761: High Power Density 22MW Trailer Mounted Load Bank	Nicole Hampton (Synergy Engineering Ltd.)
13:35	13:55	751: Power System Operation with Large Scale Wind Energy Integration	Jiabin Shen (Memorial University)
13:55	14:15	752: Underground distribution sensing and communication system	George Fofeldea (3M Corporation)
			Track 3: Regency E F
14:15	14:45	Networking Break	Regency Foyer/Balmoral
		Session 12 - Artificial Intelligence Advanced Diagnostics and Monitoring Systems Chair: Sudhakar Cherukupalli	Presenter
14:45	15:05	769: Analysis of how standards compliant bushings in Cape Spear and Mahikeng align with changing regulations	Sizwe Dhlamini (Power HV)
15:05	15:25	746: Replacing Ageing 735 kV Insulators with Modern Equivalents – A Case Study	Ehsan Abbasi (AMEC Foster Wheeler)
15:25	15:45	807: Transformer Reliability and Dissolved-Gas Analysis	James Dukarm (DELTA-X Research Inc.)
15:45	16:05	819: LV Switchgear + UFES	Mauro Dandrea (ABB)
16:05	16:25	723: New Partial Discharge Testing Method for Isolated Phase Bus and a Case Study	Luke Wang (BC Hydro)
16:25	16:45	731: Back to back switching of underground cables and capacitor banks – concerns and mitigation measures	Irroj Rahimi Pordanjani (Alta Link)
16:45	17:15	Closing Remarks by Kirsten Peck (Conference Chair) , Mike Bartell (President, CIGRE Canada) and Prize draws	
			Track 3: Regency E F

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09:00	09:30	Networking Break	2G & 2H
Parallel Technical Sessions - Track 4 (Presentation Theatre (2 nd floor))			
		Session 13 - Digital Protection, Automation, and Cyber Security Chair: Logan Connaughton	Presenter
09:30	09:50	763: Cyber Security Analyses of Islanded Microgrids Controller	Martine Chlela (McGill University)
09:50	10:10	813: Interoperability of Protection Systems in HVDC Grids	Sahar Pirooz Azad (University of Alberta)
10:10	10:30	792: Lessons Learned and Savings Achieved - Commissioning, Testing, Maintenance of a process bus pilot project	Stefan Flemming (Siemens Canada)
10:30	11:00	Networking Break	2G & 2H
		Session 14 - Power System Modelling, Analyses and Power Quality Chair: Robert Gingras	Presenter
11:00	11:20	789: The Way to a TransCanada Electric Transmission System	Dennis Woodford (Electranix Corporation)
11:20	11:40	797: Power Systems and Electricity Markets Interconnections for Clean Transportation	Brett Hauser (Greenlots)
11:40	12:00	729: Impacts of High Frequency Harmonics on Power Systems	F. Arioli (University of Campinas) on behalf of CEATI International
12:00	13:15	Lunch	Regency Foyer/Balmoral
		Session 15 - Interconnection of Non-dispatchable Generation Into Grids Chair: Jason Wong	Presenter
13:15	13:35	782: Canadian Medium Voltage Network Benchmark Model for Integration of Distributed Energy Resources	Sabbir Ahmad (AMEC Foster Wheeler)
13:35	13:55	755: Evaluation of Stand-alone PV and Battery Inverters Performance for Supplying Common Household Appliances	Farid Katiraei (Quanta Technology)
13:55	14:15	758: Investigation of Smart Inverters	Eric Valois (CEATI)
14:15	14:45	Networking Break	Regency Foyer/Balmoral
		Session 16 - Artificial Intelligence Advanced Diagnostics and Monitoring Systems Chair: Kip Morison	Presenter
14:45	15:05	735: Damage Assessment of Existing Transmission Towers using a Modified Hybrid Fuzzy-Neural model	Ibrahim Hathout (Hydro One Inc)
15:05	15:25	737: Transmission Line Criticality Ranking Process	Ed Shantz (Edward M Shantz Inc.,) on behalf of CEATI International
15:25	15:45	748: Estimating Extreme Ice on Power Line by Modified Gumbel Distribution	Ming Lu (BC Hydro)
15:45	16:05	775: Unmanned Aerial Systems Use for Transmission Line Inspection	Katherine Louman-Gardiner (BC Hydro)
16:05	16:25	743: Methodology for Developing Transmission Line Components Failure Curves	Dr. Fan Wang and Y Tsimberg (Kinectrics) on behalf of CEATI International
16:25	16:45	735: Condition Assessment and reliability evaluation of utility Wood Poles Using Fuzzy Logic and Monte Carlo Simulations	Ibrahim Hathout (Hydro One Inc)
16:45	17:15	Closing Remarks by Kirsten Peck (Conference Chair) , Mike Bartell (President, CIGRE Canada) and Prize draws	Presentation Theatre
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18:00	19:00	Regular Poster Session and Cocktail Reception		
	Paper ID	Paper Title		
	756	Investigation of grounding electrode impedance variation on the voltage and phase angle of 3 phase shield wire.	Alidou Koutou (Université du Québec à Trois Rivieres)	
	794	Voltage and Frequency Control of Parallel Voltage Source Inverters in Islanded Microgrid	Allal El Moubarek Bouzid (Université du Québec à Trois-Rivières)	
	796	A Reduced-Order Model of a Hybrid Modular Multilevel Converter	Shaahin Filizadeh (University of Manitoba)	
	810	Optimal Sizing of Energy Storage Capacity for a Wind Power Generator to Improve Loss of Load Probability	Bharath Kumar T (KL University)	
	768	Performance Evaluation of Traction and Utility Network Interface: Fault Location, Protection Coordination and Management of Transient and Temporary Overvoltage	Innocent Davidson (Durban University of Technology)	
	738	Assessment and Mitigation of Corrosion Risk in Transmission and Distribution Structures –	Peyman Taheri, Matergenics Engineering	
7:00:00 PM to 10:00:00 PM		CONFERENCE BANQUET & Best Student Paper Award		Regency D E F

Time		Tuesday, October 18, 2016		Room
17:30	19:00	Student Poster Session and Cocktail Reception		
	Paper ID	Paper Title		
	739	A Study of Fault Location Method in Double Wye Shunt Capacitor Banks	Hessamoddin Jouybari-Moghaddam (Univ of Western Ontario)	
	740	Research on fuzzy control method for power substation inspection robot	Ying Zhang (Shandong Jianzhu University)	
	753	A Comprehensive Evaluation of "DC" Power Flow Models and their Application to Power System Security Analysis	Younes Salami (Memorial University of Newfoundland)	
	757	Distributed generation long-term planning in unbalanced smart distribution systems using hourly optimal operation	Hatem Sindi (University of Waterloo)	
	767	Multi-objective optimal placement and sizing of distributed generation units by a genetic algorithm in a chilean distribution network	Rodrigo Castro (Universidad de Concepción)	
	780	Offshore Wind Power Sharing and Curtailment Control Strategy for Multi-terminal VSC-HVDC Transmission Systems	Mohamed Abdelwahed (University of Waterloo)	
	785	Multi-Functional Interphase Power Controller for Power Flow Control in the Power Transmission System	Khalid Elamari (Concordia University)	
	787	Transient Stability Assessment of BC Hydro Power System Using Decision Trees	Matin Rahmatian (The University of British Columbia)	
	799	Design Considerations of a Hybrid Cascaded Modular Multilevel Converter	Shaahin Filizadeh (Univerity of Manitoba)	
	800	Evaluation of the Operations and Control Capabilities of the BCIT Microgrid	Maninder Badial, Ali Palizban (BCIT)	
7:00:00 PM to 10:00:00 PM		CONFERENCE BANQUET & Best Student Paper Award		Regency D E F