

Transforming the **power system** for future generations

Weds, 3 Nov 2021

REGIONAL CONFERENCE: DAY 1

09:00 - 11:25	Session 1: Overhead Lines, Substations & Electrical Installations, and and DC systems & Power Electronics Session Chair: Faith Mokhonoana
09:00 - 09:10	Opening and logisitics
09:10 - 09:25	#17 Considerations for reconfiguring the transmission network; Lebo Maphumulo
09:25 - 09:40	#20 Experimental evaluation of the efficiency of a temporary ground anchor system; P. Timba
09:40 - 09:55	#11. Investigation into 8.5mm diameter 40% copper-clad steel rod as replacement for 10mm diameter copper rod for substation earthing applications; T. Marais
09:55 - 10:10	#42 A Twelve Month Field Analysis of New Overhead Line Conductor Coatings to Increase Ampacity/Reduce Power Losses in South Africa: Performance and Durability Assessments; Niall Coogan
10:10 - 10:25	#51 An Alternative Semi-Autonomous Method to Erect Overhead Line Towers; Bertie Jacobs
10:25 - 10:40	#99. The application of remotely piloted aircraft System (RPAS) for powerline inspections - Freddy Duiker
10:40 - 10:55	#94 Using an Analytical Hierarchy Process to identify areas of Land Instability within the Eskom Transmission Grid; Tshisikhawe Mphaphuli
10:55 - 11:25	Q &A
11:25 - 11:40	<i>Tea Break</i>
11:40 - 13:30	Session 2: Power system technical performance, Power System Operation & Control, and Power System Environmental Performance Session Chair: Kevin Leask
11:40 - 11:55	#18 System adequacy metrics: International review and potential applications for South Africa; Jarrad Wright
11:55 - 12:10	#69 Managing controllable thermal loads to impact the power system rate of change of frequency; Ouma Bosaletsi
12:10 - 12:25	#74 Impact of Extremely Low System Loading on Frequency and Small Signal Stability during the Pandemic; Musa Gumede
12:25 - 12:40	# 76 Analysis of Power System Low Frequency Oscillations from Phasor Measurement Units using Eigenvalue Analysis Methods; Teboho Machabe

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11:40 – 13:30	Session 2: Power system technical performance, Power System Operation & Control, and Power System Environmental Performance [Cont.]
12:40 – 12:55	#89 Subtransmission power system amelioration through increased power transfer: A review; Marnus Lyon
12:55 – 13:10	#13. Determining vulnerability parameters for power generation fleet to adverse environmental conditions - Machiel Viljoen
13:10 – 13:30	Q&A
13:30 – 14:15	<i>Lunch break</i>
14:15 – 17:00	Session 3: Active Distribution Systems and Distributed Energy Resources Session Chair: Kurt Dedekind
14:15 – 14:30	#55 Understanding customer needs in a future landscape- A South African perspective; Shamir Newelani
14:30 – 14:45	#5 Applicability of Small Modular Reactors in Sub Saharan Africa; David Nicholls
14:45 – 15:00	#10 Mitigation measures for increasing penetration of solar Photovoltaic (PV) systems in Distribution networks; A. Pandarum
15:00 – 15:15	#56 Battery Energy Storage System usage to support the Distribution System, Shamir Newelani
15:15 – 15:30	#59 A South African Context To Distributors Evolving Role To Meet The Management Of Distributed Energy Resources; Malcolm van Harte
15:30 – 15:45	<i>Tea Break</i>
15:45 – 16:00	#91 Development of a feeder hosting capacity tool for South African Municipalities; Lindokuhle Mbatha
16:00 – 16:15	#72 SSEG Grid Impact Assessments Support for Municipalities: Simplified load flow assessment tool; Fiona Oloo
16:15 – 16:30	#63. Simplified method for the design and selection of a solar photo-voltaic system, South Africa; Rudi Nel
16:30 – 16:50	Q&A
16:50 – 17:00	Announcements and Closing

Thurs, 4 Nov 2021

REGIONAL CONFERENCE: DAY 2

09:00 – 10:45	Session 4: Rotating Electrical Machines, Power Transformers & Reactors, DC systems & Power Electronics Materials & Emerging Test Techniques, and Information System & Telecommunication Session Chair: Matshidiso Phoshoko
09:10 – 09:25	#4 Deteriorating Synchronous Generation and the Future of the South African National Grid; Dr Pat Naidoo
09:25 – 09:40	#6. Optic fiber sensors for real time temperature sensing in pressurized water reactors - Bongani Maqabuka
09:40 – 09:55	#16 Managing the In-production Inspections, Factory Acceptance Tests, and On-site Incidents of Power Transformers during a Pandemic. Sidwell Mtetwa
09:55 – 10:10	#23 Telecommunication infrastructure unlocking the SMART GRID capabilities to support the future distribution power system; Mziwakhe Macina
10:10 – 10:25	#64. Benefit of High Voltage Direct Current Transmission in the Cameroonian Energy Supply System - Contimi Mouafo
10:25 – 10:45	Q&A
10:45 – 11:05	Tea Break
11:05 – 12:40	Session 5: Transmission & Distribution Equipment, Protection & Automation, Power System Environmental Performance, and Power System Technical Performance Session Chair: Anita Oommen
11:05 – 11:20	#43. Important steps and policies toward GECOL's vision and objectives for a secure and reliable Li-an power system - Simone Pasquini
11:20 – 11:35	#12. Radioactive Material Management in South Africa - Suzan Bvumbi
11:35 – 11:50	#54. Omission of inverter filter components in the modelling of Renewable Power Plants - Jacques Wattel
11:50 – 12:05	#68. Frequency protection relay performance review ahead of new UFLS programme roll-out - S. van Zyl and A. Kerr
12:05 – 12:20	#26. Grid modernization Technology: Impact vs effort matrix - Ivani Molver
12:20 – 12:40	Q&A
12:40 – 13:30	Lunch break
13:30 – 14:00	Women in Energy. Neo Mapapanyane
14:00 – 14:30	Next Generation Network. Mashilo Moabelo and Nadia Mohamed, National NGN coordinators
14:30 – 15:00	Closing Session & Prize Giving