

71st AMEU Convention 2025

Empowering South Africa's Energy Future

Leveraging Artificial Intelligence 'AI' and Smart Technologies for a Stable, Balanced, Just, and Sustainable Energy Transition in Electricity Utilities



SUNDAY, 5 OCTOBER 2025			
Affiliates Sports Day			
10:30 – 13:00	Sports Day Activities	5 KM Hike @ Beacon Bay	
17:45 – 22:00	Sports Dinner	East London Golf Club	
MONDAY, 6 OCTOBER 2025			
07:00	Registration and refreshments		
09:00	Assembly & procession	5	EXCO & VIP
	National anthem	5	BCMM Choral Choir
	Prayer and scripture reading	5	Rev Pam Daweti
09:15	Welcome by the AMEU President	10	Mr Nndwamato Tom Mutshidza, AMEU President
09:30	Welcome by the Host, Buffalo City Metropolitan Municipality (BCMM)	15	The Executive Mayor Ms Princess Faku, Buffalo City Metropolitan Municipality
09:45	Keynote Address by The Minister of COGTA	30	The Honourable Minister Mr Velenkosini Hlabisa.
10:15	Keynote Address by The Minister of Electricity and Energy	30	The Honourable Minister Dr Kgosisentsho Ramokgopa
10:45	Address by the CEO, NERSA	30	Adv Nomalanga Sithole
11:15	Announcement - Invitation for the AMEU Convention 2026 venue	15	AMEU Convention 2026 host
11:30	AMEU Honorary Membership Awards	20	Mr Jean Venter, AMEU General Secretary
11:50	Handover of AMEU Presidency chain/baton	10	Mr Jean Venter, AMEU General Secretary
12:00	Refreshment and exhibition viewing / Departure of spouses		
INTRODUCTION TO DAY 1 Session Chair: Rob Ferrier, AMEU President			
12:30	<p>PANEL DISCUSSION: “Harnessing AI and Smart Technologies: Transforming Electricity Utilities for a Prudent Fit-For-Purpose Balanced Just Energy Transition”</p> <p>This panel session will explore the critical role of artificial intelligence and smart technologies in reshaping South Africa’s energy landscape. The panel aims to inspire dialogue and collaboration among stakeholders to pave the way for a balanced and just energy future in South Africa.</p>	60	<p>Facilitator: Professor Vally Padayachee, AMEU Strategic Advisor</p> <p>Silas Zimu, Adviser to the Minister of Electricity and Energy and former Eskom and former City Power Jhb</p> <p>Prof Prathaban Moodley , General Manager, SANEDI formerly Research Manager, Eskom</p> <p>Malcolm Van Harte, Acting General Manager (Strategy & New Business development), Eskom Dx</p> <p>Sy Gourrah, Divisional CEO, Actom and former AMEU President and former Head Electricity, BCMM</p> <p>Josh Dippenaar, Manager Energy Markets, Mulilo Energy and currently PhD (Eng) Student, University of Stellenbosch</p>
13:00	Lunch and exhibition viewing		



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Session Chair: Rob Ferrier, AMEU President & BCMM

Smart grid innovations

14:00	High Voltage Cable System Testing using AC Resonant Test System	30	Rendani Mutepe Aberdare Cables
14:30	Data Farming in a Smart Low Voltage Distribution System	30	Noah Fakude City of Tshwane
15:00	Powering tomorrow: AI-driven transformer maintenance and smart metering for a resilient and just South African energy future	30	Goodness Maziya & Wesley Vorster Actom Smart Technologies
15:30	Refreshments and exhibition viewing		

Session Chair: Refilwe Mokgosi, AMEU Past President & City of Ekurhuleni

Collaboration across the energy sector

16:00	Innovative Business Models for Scalable Smart Metering Implementation in Emerging Markets	30	Maruthi Mallealli Wirepas (Finland & India)
16:30	The Benefits of using AI in capacity building and skills development in utilities	30	Shamir Newalani & Portia Zulu Eskom Distribution
17:00	Day Adjournment		
17:15	Cocktail Function Hosted by The Executive Mayor of Buffalo City Municipality at the Exhibition Area		

TUESDAY, 7 OCTOBER 2025

07:30	Registration and Refreshments		
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INTRODUCTION TO DAY 2

Session Chair: Rob Ferrier, AMEU President

08:00	Women-in-Electricity (WiE) Programme	30	Sheila Cele AMEU WiE Chairperson
08:30	WiE Panel Discussion Topic: AI as the Catalyst: Driving utility reform through Smart Technologies to meet critical KPIs in billing Efficiency, grid reliability, and customer satisfaction	30	Panellists: Fakazile Nkomiyahlaba , Nelson Mandela Bay Municipality Mmaphuthi Nkwana , GLS Consulting Khanya Dingilizwe , City of Cape Town Happiness Mhlongo , National Transmission Company South Africa Fezeka Mhoshu , eThekweni Municipality
09:00	Equitable Energy Access in Grid Modernization: Frameworks for Justice-Centred Utility Transformation	30	Sindisiwe Shoji & Bhekani Hadebe eThekweni Municipality
09:30	Refreshments and exhibition viewing		

Session Chair: Siyabulela, GQWEDE, AMEU Deputy President

BJETfor electricity utilities

10:00	The critical role of well governed and balanced electricity wheeling in enabling energy security, reliability and industry sustainability.	30	Prof Vally Padayachee & Terry Njuguna AMEU Strategic Advisor & Eskom Dx
10:30	Exhibition Viewing	30	
11:00	Lessons learned from installing 1MW rooftop PV and how to improve the system.	30	Sy Gourrah Actom
11:30	SSEG and service connection online app	30	Ismail Jefferies City of Cape Town
12:00	Lunch and exhibition viewing		

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Session Chair: Veer RAMNARIAN, AMEU EXCO and SAIEE PRESIDENT

Data-driven decision making

13:00	Machine Learning Model Development for Predictive Maintenance in Industrial Robotics	30	Phathutshedzo Benedict Mathivha University of JHB
13:30	The critical role of the electricity grid stability renewables to non-renewables "sweet spot ratio" in ensuring the reliability and resilience of the national electricity grid to prevent it from going into total grid collapse and total blackout	30	Prof Vally Padayachee AMEU Strategic Advisor
14:30	Using AI, digitalization and analytics for improved service delivery and customer relations opportunities in South Africa's wholesale electricity market	30	Dr Mark Bedser & Aumkar Sukhoo Eskom
15:00	Smart substations for smart grids: pioneering digital protection in Namibia	30	Herman Mare Actom
15:30	Day Adjournment		
18:00	Gala Dinner Hosted by the Buffalo City Metropolitan Municipality (BCMM)		

WEDNESDAY, 8 OCTOBER 2025

08:00	Registration and exhibition viewing		
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INTRODUCTION TO DAY 3

Session Chair: Ms Leila Mahomed Weideman, Chairperson AMEU JET Committee

Cost-effective AI and cybersecurity solutions in smart energy systems

8:30	Mitigating Cybersecurity Threats in Smart Metering Infrastructure Through Standard Security Frameworks	30	Shawn Papi Eskom Research, Testing & Development Business Unit
9:00	Towards a Self-Aware & Self-Healing Network	30	Willie van Wyk CT Lab
9:30	Smart Grid Innovations: Real-Time adaptive protection for evolving networks	30	Kobus Wilken George Municipality
10:00	Future municipal networks	30	Geeven Moodley Digsilent Buyisa
10:30	The Role of Municipalities in a Liberalised Electricity Sector: Challenges and Opportunities in South Africa's Wholesale Electricity Market	30	Mmaphuthi Nkwana GLS Consulting
11:00	Refreshments and exhibition viewing		

Session Chair: Ms Keseree Rajoo, Chairperson, AMEU Affiliates

Service delivery and customer relations

11:30	Reflections on co-designing a solar public lighting pilot in Marikana informal settlement, Cape Town	30	Thandeka Tshabalala City of Cape Town
12:00	Eskom Distribution Agency Agreement (DAA)	30	Mpumelelo Mnyani Eskom
12:30	Collaborative Digital Innovation Ecosystems for Just Energy Transition	30	Phatudi Malepe University of the Witwatersrand
13:00	Lunch		

Session Chair: Rob Ferrier, AMEU PRESIDENT

Convention forum: All delegates invited

14:00	Closing session AMEU best paper award CIGRE best technical paper award Thank you message from the AMEU Affiliates Chair message Thank you message from the partners Closing address from the AMEU President		
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