

CEPSI

SINGAPORE 2025

Empowering the Energy Transition



PROVISIONAL AGENDA

Time		Sands Expo & Convention Centre, Singapore									
		Level 5					Level 4				
Meeting Room	5001	5002	5003	5101	5102	4711	4712	4713	4611	4612	4613
Day 2 - 30 October											
12:30 - 2:00 PM	Lunch					NOT IN USE					
2:00 - 3:30 PM	B6-8 Low-carbon Technologies and Transition Strategies (7) Chair: Dr Dhivya Sampath Kumar (IEEE PES)	D1 Customer Experience and Retail Digital Transformation (6) Chair: Matthew Gleeson (Oracle)	E2 ICT Innovation and Integrated Systems for Utility Operations (6) Chair: Sheik Fareed Muhammad Musthafa Roomi (IEEE PES)		F6-7 ESG, Sustainable Financing and Stakeholder Engagement (6) Chair: Ngiap Tiam Koh						
3:30 - 4:00 PM	Coffee Break (30 mins)										
4:00 - 5:30 PM	B3 Energy Efficiency, Circular Economy and Conservation Technologies (6) Chair: Dr Dhivya Sampath Kumar (IEEE PES)	D2 Operational Efficiency and Smart Energy Technologies (7) Chair: Matthew Gleeson (Oracle)	E3 Cybersecurity and Secure Communications for Power Systems (5) Chair: Sheik Fareed Muhammad Musthafa Roomi (IEEE PES)		F2.1 Decarbonisation and Renewable Transition Strategies (7) Chair: Sze Sing Lee (IEEE PES)						
Day 3 - 31 October											
8:00 - 8:45 AM	Registration and Coffee										
8:45 - 10:30 AM	A1.1 Integrated Condition Monitoring and Predictive Maintenance for Power Systems (7) Chair: Dr Er Lai Kai Xian (SP Group)	A1.3 Condition Assessment and Reliability Testing of Cables and Power Equipment (7) Chair: Dr Cao Hongyan (SP Group)	A5.1 Advances in HVDC, Underground Transmission and Power Quality Systems (7) Chair: Chem Wen Kwang (SP Group)	A6.1 Upgrading and Managing Ageing Infrastructure (5) Chair: Tiran Fernando (DNV)	F4 Grid Flexibility Requirements and Solutions (8) Chair: Dr Can Berk Saner	B1.1 Low-Carbon Energy Production and Carbon Capture I (6) Chair: Dr Dong Jiaxin (IEEE PES)	C2.1 DER Integration and Grid Modernisation (7) Chair: Tan Ru Chen (SP Group)	C3 Advances in Substation Digitalisation, Automation, and Cybersecurity (6) Chair: Sandeep Singh	C6 AMI and Smart Meter Applications (6) Chair: Tan Teck Lee (IEEE PES)	E1 Industry 4.0 Applications in Power Systems (7) Chair: Bryan Lee	E5.1 AI Applications in Power System Operations and Asset Management (6) Chair: Dr Sivaneasan Bala Krishnan (IEEE PES)
10:30 - 11:00 AM	Coffee Break (30 min)										
11:00 - 12:30 PM	A1.2 Asset Health Monitoring and Management (6) Chair: Dr Er Lai Kai Xian (SP Group)	A1.4 Next-Generation Monitoring and Fault Detection Technologies (6) Chair: Dr Cao Hongyan (SP Group)	A5.2 Flexible AC/DC Systems and Protection Strategies (6) Chair: Danny Quek (SP Group)	A6.2 Asset Sustainability and Lifecycle Management (7) Chair: Tiran Fernando (DNV)	F3 Integration of Variable Renewable Energy (7) Chair: Dr. Tan Kuan Tak	B1.2 Low-Carbon Energy Production and Carbon Capture II (5) Chair: Dr Dong Jiaxin (IEEE PES)	C2.2 Smart Grid Control, Stability and Optimisation Technologies (6) Chair: Dr. Tommy Halim	C1 Digitalisation and Data Analytics for Grid Management and Reliability (4) Chair: Sandeep Singh	C8 Microgrid Design, Operation, and Control (5) Chair: Dr. Sivaneasan Bala Krishnan	E4 Digitalisation, IoT and Data Integration for Power Networks (6) Chair: Dr Can Berk Saner	E5.2 Generative and Knowledge-Based AI in in Utilities (6) Chair: Ngiap Tiam Koh (IEEE PES)
12:30 - 1:30 PM	Lunch										
1:30 - 3:30 PM	A2.1 Digital Intelligence and Predictive Technologies for Power System Operations (6) Chair: Dr Er Lai Kai Xian (SP Group)	A2.2 Equipment Monitoring, Diagnostics and Predictive Maintenance Technologies (6) Chair: Lorenzo Paschini	A7-8 Advanced Grid Protection and Power Flow Optimisation (8) Chair: Chung Der Chyuan (SP Group)	A9 Workforce Development and Organisational Practices (5) Chair: Bryan Lee	F2.2 System Planning, Optimisation and Infrastructure Resilience (8) Chair: Sandeep Singh	B2 Emerging Energy Generation Technologies (7) Chair: Dr. Tan Kuan Tak	B5 Advanced Energy Storage Solutions (7) Chair: Dr. Tommy Halim	C10 Renewable Integration and Grid Stability (6) Chair: Tan Ru Chen (SP Group)	C7 EV Charging and V2G Technologies (7) Chair: Dr. Sivaneasan Bala Krishnan	E5-7 Intelligent Systems, Field Assistance and Operational Innovation (6) Chair: Ngiap Tiam Koh	
	End of Technical Paper Presentation Sessions										

Track A: T&D Networks Technologies and Strategies

Session A1.1: Integrated Condition Monitoring and Predictive Maintenance for Power Systems

Sub-track: A.1 Advanced Monitoring and Maintenance for Power Equipment

Session Chair: Dr Er Lai Kai Xian, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:30 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5001

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	186	Holistic Strategy for Vacuum Circuit Breaker Maintenance at Transmission and Distribution Network Presenter: Joseph Chan, The Hongkong Electric Co., Ltd. (on behalf of Sheung Chan)
9:00 – 9:15 AM	33	On Site Partial Discharge Measurement of Mineral Oil Distribution Transformer Using Single Phase Induced Voltage Source Presenter: Jia Ming Khor (ON Engineers Pte Ltd)
9:15 – 9:30 AM	285	On-site IVPD Measurement: A Practical Approach to Evaluating Partial Discharge Severity in Distribution Transformers in Singapore Presenter: Jun Li (SP Group)
9:30 – 9:45 AM	154	Practical Approach for Distribution Transformers Incipient Fault Monitoring with Health Assessment Presenter: Tik Lam Yip (SP Group)
9:45 – 10:00 AM	112	Pilot Wire Supervision (PWS) Enhancement to Monitor Pilot Wire Short Circuit in the Distribution Network Presenter: Alvin Koh (SP Group)
10:00 – 10:15 AM	280	Optimization of Maintenance Management in Hydroelectric Plants: Implementing Oil Steam, Brake Dust, and Slip Ring Dust Collector Extraction Systems Presenter: Wilbert Álvarez (China Three Gorges Corporation (CTG))
10:15 – 10:30 AM	337	Integration of IoT to Work Management System & Asset Analytics Towards Enabling Predictive Maintenance Implementation Presenter: Nursyahira Binti Sharif (Tenaga Nasional Berhad)
10:30 AM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A1.2: Asset Health Monitoring and Management

Sub-track: A.1 Advanced Monitoring and Maintenance for Power Equipment

Session Chair: Dr Er Lai Kai Xian, SP Group

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5001

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	459	Optimising Asset Lifecycle through Data-Driven Asset Insights Presenter: Afifah Binti Mohd Zahid [Tenaga Nasional Berhad]
11:15 – 11:30 AM	185	Development of Asset Health Management System to Embrace Digital Asset Management Presenter: Kwong Shing, Anson Lo [CLP Power Hong Kong Limited]
11:30 – 11:45 AM	130	Proactive Infrastructure Asset Health Management with A Hybrid Condition-Aware Probabilistic Approach Presenter: Ziming Yan [Nanyang Technological University]
11:45 – 12:00 PM	319	Centralized On-Line Monitoring System (COMS) as O&M's tool in Equipment Maintenance Management Presenter: Dennis Jose Gan [National Grid Corporation of Philippines]
12:00 – 12:15 PM	523	Substation Equipment Data Integration Platform for Grid Assets Utilization Management Presenter: Kittipob Patanavanich [Electricity Generating Authority of Thailand]
12:15 – 12:30 PM	116	Application of PDC Test on Health Condition Monitoring of Distribution Cables in Singapore Presenter: Alvin Koh, SP Group [on behalf of Bobby Goh]
12:30 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A1.3: Condition Assessment and Reliability Testing of Cables and Power Equipment

Sub-track: A.1 Advanced Monitoring and Maintenance for Power Equipment

Session Chair: Dr Cao Hongyan, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:15 AM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5002

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	86	The Study of On-line Partial Discharge Diagnostics Test on Underground Cable Presenter: Somkiat Puangkaew (Metropolitan Electricity Authority)
9:00 – 9:15 AM	8	Towards Optimised Distribution Asset Sensing and Analytics Presenter: Nor Fazlinda Binte Mohd Affandi (SP Group)
9:15 – 9:30 AM	563	Online Transformer DGA Monitoring – Modern Trends in Condition Assessment Presenter: Brian Chiam (GE Vernova)
9:30 – 9:45 AM	244	Optimising Partial Discharge Testing Strategies for High Voltage Asset Reliability Presenter: Andrew Suan, EA Technology Asset Management Pte Ltd (on behalf of Weng Heng Yuen)
9:45 – 10:00 AM	32	Partial Discharge Localization in 22kV Cables using Single-end and Dual-end Methods Presenter: Muhammad Fadzil Bin Jaffar (ON Engineers Pte Ltd)
10:00 – 10:15 AM	214	Study on Gas Analysis Method and Electrical Characteristics of 77kV XLPE Cable Terminations Presenter: Ryohei Suzuki (Chubu Electric Power Grid Co., Inc.)
10:15 AM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A1.4: Next-Generation Monitoring and Fault Detection Technologies

Sub-track: A.1 Advanced Monitoring and Maintenance for Power Equipment

Session Chair: Dr Cao Hongyan, SP Group

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5002

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	133	Advanced Vibration Monitoring Systems for Overhead Transmission Lines: Enhancing Grid Reliability and Maintenance Strategies Presenter: Alban Cotte [Sicame Group]
11:15 – 11:30 AM	150	Automated Fault Detection and Response in Radial Sub-Transmission Lines Supplying Industrial and Commercial Customers Using Smart Mapping and Alerts Presenter: Esel Alyssa Dimapilis [Manila Electric Company (MERALCO)]
11:30 – 11:45 AM	281	Comprehensive Analysis of Lightning-Induced Faults and SOTF Protection Malfunctions in 220 kV Transmission Lines: Case Study of Chaglla Hydroelectric Plant Presenter: Arnold Medina [China Three Gorges Corporation (CTG)]
11:45 – 12:00 PM	302	Hybrid Applications of Broadband Over Power Line Communication (BPLC) and Wireless 5.5G in MV Substation Power Communication Fiber Network Presenter: Chan Hou In, Oscar [Companhia de Electricidade de Macau]
12:00 – 12:15 PM	200	Multimodal Fusion and Bidirectional Knowledge Distillation for Online Partial Discharge Monitoring Presenter: Li Hongqun, SP Group [on behalf of Jinsheng Ji]
12:15 – 12:30 PM	90	Utilization of IoT Technology for Maintenance of Substation Equipment Presenter: Hiroko Isaji [Chubu Electric Power Grid Co., Inc.]
12:30 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A2.1: Digital Intelligence and Predictive Technologies for Power System Operations

Sub-track: A.2 Digital Solutions for Diagnostics and Maintenance

Session Chair: Dr Er Lai Kai Xian, SP Group

Date: 31 October 2025, Friday

Time: 1:30 – 3:15 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5001

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	9	Machine Learning Application on Medium Voltage Asset Sensing through High Frequency Current Transformer Presenter: Kai Xian Lai (SP Group)
1:45 – 2:00 PM	572	Multi-source Information Fusion for Substation Hidden Disease Detection Presenter: Yuewei Tian (Guizhou Power Grid Co Ltd)
2:00 – 2:15 PM	13	Variable Fault Simulator to Identify Potential Asset Failure for Distribution Power Equipment Presenter: Li Xin Ng (SP Group)
2:15 – 2:30 PM	505	A CNN-BiLSTM Distribution Network Ground Fault Phase Selection Method Incorporating Attention Mechanisms Presenter: Xiang Lun Nie (Guizhou Power Grid Co., Ltd. Bijie Power Supply Bureau)
2:30 – 2:45 PM	409	The Need of Fleet Management – How to Manage Thousands of Intelligent Devices Like RTUs and Cellular Modems in a Distribution Grid Presenter: Peter Noglik (Hitachi Energy Germany AG)
2:45 – 3:00 PM	549	Automating Commissioning Tests, Accepting Remote Maintenance and Guaranteeing Inventory Integrity Using a Device Management System Presenter: Chirag Mistry (GE Vernova)
3:00 – 3:15 PM	132	New Developments for Testing and Evaluation of Distribution Cables Presenter: Markus John (HIGHVOLT Prüftechnik Dresden GmbH)
3:15 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A2.2: Equipment Monitoring, Diagnostics and Predictive Maintenance Technologies

Sub-track: A.2 Digital Solutions for Diagnostics and Maintenance

Session Chair: Lorenzo Paschini, Doble Engineering

Date: 31 October 2025, Friday

Time: 1:30 – 3:00 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5002

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	119	Development of Automated Inspection Technology for Overhead Transmission Lines Using Drones Presenter: Michiharu Ueki, Chubu Electric Power Grid Co., Inc. [on behalf of Shunsuke Ishida]
1:45 – 2:00 PM	339	UV Live Detection System for Aging and Fracture of Composite Insulator Core Rods Presenter: Wei Guo [CSG Guangdong Dongguan Power Supply Bureau]
2:00 – 2:15 PM	209	Online Partial Discharge Monitoring on Medium Voltage Three Core Underground Cables: Experiences on Detection, Elaboration and Localization Presenter: Lorenzo Paschini [Doble Engineering]
2:15 – 2:30 PM	240	Accurate Setting-Free Fault Locator for Power Transmission Networks Using Synchronized and Unsynchronized Data Presenter: OD Naidu [Hitachi Energy]
2:30 – 2:45 PM	127	Thermal Models for Transformer Overload Management: Implementation Challenges and Solutions Presenter: Christian Haselbeck, Maschinenfabrik Reinhausen GmbH [on behalf of Andreas Dreger]
2:45 – 3:00 PM	128	Addressing Key Limitations in DGA Interpretation: An Implementation Case Study for Online OLTC Monitoring Presenter: Christian Haselbeck, Maschinenfabrik Reinhausen GmbH [on behalf of Andreas Dreger]
3:00 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A5.1: Advances in HVDC, Underground Transmission and Power Quality Systems

Sub-track: A.3 Digital Solutions for Diagnostics and Maintenance, A.4 Flexible AC/DC Transmission Systems (FACTS and FDCTS) & A.5 Underground Transmission & Distribution Networks and Substations

Session Chair: Chern Wen Kwang, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:30 AM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5003

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	565	A review of HVDC cable systems configurations for long distance submarine power transmission Presenter: Davide Pietribiasi (Prysmian)
9:00 – 9:15 AM	295	Superconductor Material Cable in High Voltage Direct Current Systems using Yttrium Barium Copper Oxide Presenter: Sheng Choon Er (SP Group)
9:15 – 9:30 AM	23	Optimization of Green Hydrogen Electrolyser Plant Efficiency and Required Power Quality Solution Presenter: Satyajit Pandya (Reinhausen India Pvt. Ltd.)
9:30 – 9:45 AM	89	Residential Area LV Distribution Imbalance Problem Solution Based on Power Quality Compensator (PQC) Presenter: Thanawin Yuenyongsuwan (Metropolitan Electricity Authority)
9:45 – 10:00 AM	320	Synergistic Development and Opportunities of Underground Power Cable and Common Service Tunnel in Macau Presenter: Fong Chi Pui, Companhia de Electricidade de Macau (on behalf of Wai Hang Fong)
10:00 – 10:15 AM	463	Strategies for Distribution Cable Remediation: Lessons from Singapore's Power Grid Presenter: Chun Sern Yiong (SP Group)
10:15 – 10:30 AM	539	Labrador Underground Substation Power Cable Circuit Cooling Design Presenter: Wen Kwang Chern (SP Group)
10:30 AM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A5.2: Flexible AC/DC Systems and Protection Strategies

Sub-track: A.5 Underground Transmission & Distribution Networks and Substations & A.8 Addressing Network Congestion

Session Chair: Er Danny Quek Kai Hock, SP Group

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5003

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	396	Technical Challenges of Transmission Equipment in a 230kV Underground Transmission Substation in Singapore Presenter: Danny Quek Kai Hock [SP Group]
11:15 – 11:30 AM	12	Statistical Impact Analysis of Underground Medium Voltage Network Switching Through Applied Load Flow Model Presenter: Bryan Lee, SP Group [on behalf of Sian Ming Goh]
11:30 – 11:45 AM	18	Assessing Feasibility of Deploying Distance Protection within Underground Medium Voltage Distribution Network Presenter: Ng Li En [SP Group]
11:45 – 12:00 PM	114	Design Policy and Verification Results for PACS Applying IEC 61850 Process Bus Presenter: Takashi Kobayashi [Chubu Electric Power Grid Co., Inc.]
12:00 – 12:15 PM	156	Enhancing Feeder Protection Relay Settings in Urban Areas Due to Inrush Current Issues Presenter: Phethai Nimsanong [Metropolitan Electricity Authority]
12:15 – 12:30 PM	236	Setting-free, Intelligent Auto-Reclosing Scheme for Protection of Mixed Power Lines Presenter: Vedanta Pradhan [Hitachi Energy]
12:30 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A6.1: Upgrading and Managing Ageing Infrastructure

Sub-track: A.6 Managing Ageing Infrastructure

Session Chair: Tiran Fernando, DNV

Date: 31 October 2025, Friday

Time: 8:45 – 10:15 AM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5101

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	135	Integrated Asset Health Index (AHI) and Asset Risk Model: A Practical Tool to Guide Capital Planning and Maintenance Investments of T&D Assets Presenter: Farah Hanani (DNV AS)
9:00 – 9:15 AM	27	Recent Development and Advancements in Asset Management Systems Enable Power Utilities in Addressing Challenges Presenter: Kang Seng Seow (Verixiom Pte. Ltd.)
9:15 – 9:30 AM	401	Reconfiguration of Busbar Protection System During Renewal Presenter: Der Chyuan Chung (SP Group)
9:30 – 9:45 AM	548	Software and Hardware Considerations for Virtualized Protection and Control System Presenter: Krishnakumar Venkataraman, GE Vernova (on behalf of Chirag Mistry)
9:45 – 10:00 AM	120	Interchanging Traditional Power Transformer Medium-Voltage Condenser Type Bushings with Modern Composite Polymeric Bushings Presenter: Augusto Carletto (Maschinenfabrik Reinhausen GmbH)
10:00 AM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A6.2: Asset Sustainability and Lifecycle Management

Sub-track: A.6 Managing Ageing Infrastructure

Session Chair: Tiran Fernando, DNV

Date: 31 October 2025, Friday

Time: 11:00 – 12:45 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5101

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	533	Adopting Sustainability Management in Asset End of Life & Asset Disposal Process Using Digital Systems Presenter: Jun Nian Lim [Tenaga Nasional Berhad]
11:15 – 11:30 AM	255	Effective Sulphur Hexafluoride Cycle Management: Climate Protection, Reliability and Cost Reduction Hand in Hand Presenter: Ulrich Ammer [DILO GmbH]
11:30 – 11:45 AM	45	Implementing a Transformer Fleet Management Strategy Combining Reliability and Sustainability Dimensions: A German Utility Case Study Presenter: Lando Peters [Maschinenfabrik Reinhausen GmbH]
11:45 – 12:00 PM	217	Transformer Oil Regeneration – Transformer Life Extension Program Presenter: Adrian Sie Wei Hoe & Chiong Ching Ping [Sarawak Energy Berhad]
12:00 – 12:15 PM	257	Realization of Maintenance-Free OH Lines with Highly Corrosion Resistant Specifications of Coating and Plating Presenter: Yuma Hayashi [Chubu Electric Power Grid Co., Inc.]
12:15 - 12:30 PM	73	How to Extend the Life Cycle of Ageing Cables in HV/MV Grids Presenter: Klaus Winter [Holmgren Institute]
12:30 – 12:45 PM	460	Managing Ageing Power Transformers in Distribution Systems Using Artificial Intelligence Presenter: Muhammad Rasyidi Bin Zainal Abidin [Tenaga Nasional Berhad]
12:45 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A7-8: Advanced Grid Protection and Power Flow Optimisation

Sub-tracks: A.7 power Flow Control and Dynamic Equipment Ratings & A.8 Addressing Network Congestions

Session Chair: Chung Der Chyuan, SP Group

Date: 31 October 2025, Friday

Time: 1:30 – 3:15 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5003

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	66	Grid Sustainability: The First 5-Terminal Protection Scheme for Managing Complex Power System Presenter: Nur Ismahani Mohd Zamri (Tenaga Nasional Berhad)
1:45 – 2:00 PM	28	Symmetrical Components Theory for Calculation of Fault Current Using Simple Drawings Presenter: Sheng Hong Lim (ON Engineers Pte Ltd)
2:00 – 2:15 PM	507	Load Modelling for Volt-Var Optimization Control in Limited Network Visibility Presenter: Calvin Ku Shong Ching (Tenaga Nasional Berhad)
2:15 – 2:30 PM	11	Medium Voltage Switching Optimization Using Time-Based Load Variation Study for Underground Electrical Network with High Current Flow Presenter: Ryan Weien Ravichandran (SP Group)
2:30 – 2:45 PM	61	Comprehensive Approach to Distribution Network Efficiency with Advanced Conductor Accessories and HTLS Solutions Presenter: Lionel Bastos (Sicame Group)
2:45 – 3:00 PM	404	A Smart System Protection Scheme (SPS) for a Resilient Sarawak State Grid, Malaysia Presenter: Jacqueline Ban & Lo Thuan Kai (Sarawak Energy Berhad)
3:00 – 3:15 PM	550	Dynamic System Rating for Transmission Corridors Presenter: Chirag Mistry (GE Vernova)
3:15 PM		Closing and Attendance Photo Taking

Track A: T&D Networks Technologies and Strategies

Session A9: Workforce Development and Organisational Practices

Sub-track: A.9 Workforce and Knowledge Management in Energy Sector

Session Chair: Bryan Lee Zhen Yuan, SP Group

Date: 31 October 2025, Friday

Time: 1:30 – 2:45 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5101

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	419	Beyond Incentives: Implementing the Eight-For Framework to Enhance Employee Engagement Presenter: Han Zhang (Shenzhen Power Supply Co., Ltd)
1:45 – 2:00 PM	443	Driving Operational Excellence Through Workforce Empowerment at Sabah Electricity Transmission Division Presenter: Ahmad Nassaruddin Kamaruzaman, Sabah Electricity Sdn Bhd (on behalf of Racheal Lim Pui Lang)
2:00 – 2:15 PM	485	Innovative Research and Practice of Digital Job Evaluation in the Power Industry Based on Multimodal Fusion and Knowledge Graph Presenter: Jin Teng Ge, China Southern Power Grid Co., Ltd. (on behalf of Cheng Liu)
2:15 – 2:30 PM	19	Ensuring a Future Ready and Future Oriented Workforce Through Specialized Essential Courseware for Knowledge Management Amongst Technical Staff Presenter: Bryan Lee, SP Group (on behalf of Kok Tee Lim)
2:30 – 2:45 PM	431	Cross Cultural Synergistic Development of Labour and Knowledge in Global Energy Cooperation: Governance Mechanisms and Innovative Practices in the Sahiwal Project of China Pakistan Economic Corridor Presenter: Binxiang Liu (China Huaneng Group Co., Ltd)
2:45 PM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B1.1: Low-Carbon Energy Production and Carbon Capture I

Sub-track: B.1 Low-Carbon Energy Production and Carbon Capture

Session Chair: Dr Dong Jiaxin, IEEE PES

Date: 31 October 2025, Friday

Time: 8:45 – 10:15 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4711

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	30	Gaseous Fuels for Distributed Power Complementing Renewables Presenter: Klaus Payrhuber (INNIO Jenbacher GmbH & Co OG)
9:00 – 9:15 AM	371	Decarbonization Trailblazer: Engineering and Natural Carbon Management at Stesen Janakuasa Tuanku Muhriz (SJTM) Presenter: Muhammad Asyraf Ridzuan (Tenaga Nasional Berhad)
9:15 – 9:30 AM	144	Technical and Regulatory Insights on Fuel Changeover for Hydrogen-Firing Gas Turbines Presenter: Mohammad Nurizat Rahman (DNV AS)
9:30 – 9:45 AM	524	Techno-Economic Assessment of Pilot-Scale Synthetic Methane Production Presenter: Nurul Noramelya binti Zulkefl (Tenaga Nasional Berhad)
9:45 – 10:00 AM	83	Demystifying Carbon Capture, Utilization and Storage: A Power Utility Corporate Academy Journey of Energy Transition Capability Uplifting Presenter: Mohd Firdaus Mad Karim (Tenaga Nasional Berhad)
10:00 – 10:15 AM	267	Design and Upgrade of DC Excitation System with Advanced Digital AVR in Hydro-Power Plant Presenter: Hariharan Balan & Raajabairavi Sivaprakas (Tenaga Nasional Berhad)
10:15 AM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B1.2: Low-Carbon Energy Production and Carbon Capture II

Sub-track: B.1 Low-Carbon Energy Production and Carbon Capture & B.5 Advanced Energy Storage Solutions

Session Chair: Dr Dong Jiaxin, IEEE PES

Date: 31 October 2025, Friday

Time: 11:00 – 12:45 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4711

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	58	Energy-Storage-Based Grid-Forming Converters: Technology Review and Future Trends Presenter: Liang Xian [DNV AS]
11:15 – 11:30 AM	379	Analysis of the Development of the CCUS against the Background of the Low-carbon Transformation of Coal-fired Power Generation Presenter: Nan Li [China Huaneng Group Co., Ltd]
11:30 - 11:45 AM	124	Research on the Innovative Development Path of Independent Shared Energy Storage Presenter: Lin Wang [China Three Gorges Corporation (CTG)]
11:45 – 12:00 PM	125	Optimization of Energy Storage Requirements in High-Penetration Renewable Power Systems: A Simulation-Based Approach Presenter: Yin Likun [China Three Gorges Corporation (CTG)]
12:00 – 12:15 PM	513	Beyond amines: Industrial feasibility of solvent-free CO ₂ capture in power plants Presenter: Fatin Nuraliya binti Muziadi [Tenaga Nasional Berhad]
12:15 PM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B2: Emerging Energy Generation Technologies

Sub-track: B.2 Emerging Energy Generation Technologies

Session Chair: Dr Tan Kuan Tak, IEEE PES

Date: 31 October 2025, Friday

Time: 1:30 – 3:15 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4711

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	92	Adoption of Hydrogen for Power Generation to Support Decarbonisation in Hong Kong Presenter: Nok Ching Lau Cyrus, CLP Power Hong Kong Limited (on behalf of Wai Ip Ho)
1:45 – 2:00 PM	192	Introducing a Second Gas Source for Gas-fired CCGTs in Lamma Power Station Presenter: Kent Choy (The Hongkong Electric Company)
2:00 – 2:15 PM	199	Challenges from Migration of Carbon Free Fuel – Hydrogen in Macau Presenter: Chang Lu (Companhia de Electricidade de Macau)
2:15 – 2:30 PM	315	Progress of Comprehensive Utilization Technology for Agricultural and Forestry Biomass Waste in China Presenter: Song Jinghui (China Southern Power Grid Co., Ltd.)
2:30 – 2:45 PM	421	Operation And Maintenance Experience in Managing the World's First Gas Turbine 9HA.02 Fleet Combined Cycle Power Plant in Malaysia Presenter: Mohd Syazwan Othman (Tenaga Nasional Berhad)
2:45 – 3:00 PM	475	Requirements, Design and Qualification of Transformers equipped with On-Load Tap-Changer for Floating Offshore Substations Presenter: Sebastian Rehkopf (Maschinenfabrik Reinhausen GmbH)
3:00 – 3:15 PM	364	Development of Site Assessment Criteria for Integration of Hybrid Hydropower Floating Solar Project: Case Studies for Peninsular Malaysia Presenter: Jansen Luis Luis Alexander (Tenaga Nasional Berhad)
3:15 PM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B3: Energy Efficiency, Circular Economy and Conservation Technologies

Sub-track: B.3 Energy Efficiency and Conservation Technologies & B.7 Circular Economy and Sustainable Material Use

Session Chair: Dr Dhivya Sampath Kumar, IEEE PES

Date: 30 October 2025, Thursday

Time: 4:00 – 5:35 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5001

Programme

TIME	ID	PAPER TITLE
		Opening Remarks
4:00 – 4:05 PM		Dr. Ng Sing Muk, GM R&D, Sarawak Energy Berhad
4:05 – 4:20 PM	159	Power Station Technology Innovations in Sustainable Power Generation Presenter: Yin Likun, China Three Gorges Corporation (CTG) (on behalf of Zeang Guo)
4:20 – 4:35 PM	282	Study of Heat Distribution in Penstock Pipes Due to Solar Radiation: Case Study of Chaglla Hydropower Plant Presenter: Brian Arias Llaja (China Three Gorges Corporation (CTG))
4:35 – 4:50 PM	346	Research on Self-cleaning Technology for Photovoltaic Modules Based on a Multidisciplinary Collaborative Innovation System Presenter: Ruiyang Ma (Beijing Energy International Holding Co., Ltd.)
4:50 – 5:05 PM	423	Application Study on Ammonia Production by Urea Direct-injection Pyrolysis in SCR Denitration Technology of Gas Steam Combined Cycle Unit Presenter: Chen Dong (Xi'an Thermal Power Research Institute Co., Ltd)
5:05 – 5:20 PM	465	Capacity building in energy efficiency and sustainability for net-zero transition Presenter: Lock Kai Sang (Singapore Institute of Technology)
5:20 – 5:35 PM	512	Advancing mineral carbonation in the circular economy: A sustainable pathway for power industry decarbonization Presenter: Afif Izwan Abd Hamid (Tenaga Nasional Berhad)
5:35 PM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B5: Advanced Energy Storage Solutions

Sub-track: B.5 Advanced Energy Storage Solution

Session Chair: Dr Tommy Halim, Maschinenfabrik Reinhausen GmbH

Date: 31 October 2025, Friday

Time: 1:30– 2:45 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4712

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	313	Application of Mobile Battery Energy Storage System for Critical Events at Macau Presenter: Cheng Tai Wu [Companhia de Electricidade de Macau]
1:45 – 2:00 PM	137	Development of An Innovative Control & Monitoring System for BESS to Spearhead Malaysia's NETR Presenter: Mohamed Fau'ad Bin Faisal [Tenaga Nasional Berhad]
2:00 – 2:15 PM	193	Online Module Active Balancing of BESS with Mixed-Type Modules Presenter: Donghan Shi [DNV AS]
2:15 – 2:30 PM	264	Study on the Development and Application of Energy Efficiency Products Based on Distributed Compressed Air Energy Storage Technology Presenter: Chao Tian [State Grid Corporation of China (SGCC)]
2:30 – 2:45 PM	569	Overview of Performance of First Utility-Scale BESS in Singapore Grid Presenter: Yanqin Zhan [Sembcorp Utilities]
2:45 PM		Closing and Attendance Photo Taking

Track B: Green Energy Technologies

Session B6-8: Low-carbon Technologies and Transition Strategies

Sub-track: B.6 Decarbonisation Technologies for Power Grids & B.8 Green Hydrogen, Fuel Cells, and Distributed Energy Resources (DER)

Session Chair: Dr Dhivya Sampath Kumar, IEEE PES

Date: 30 October 2025, Thursday

Time: 2:00 – 3:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5001

Programme

TIME	ID	PAPER TITLE
2:00 – 2:15 PM	42	Design of Green Hydrogen-Based Energy Storage System For Microgrid Pilot Project at EGAT Learning Center, Headquarter Presenter: Prem Chutiampaiwong (Electricity Generating Authority of Thailand)
2:15 – 2:30 PM	65	Life Cycle Assessment for Substations and Activities for Reduction of Greenhouse Gas Emissions Presenter: Tatsuya Watanabe (Chubu Electric Power Grid Co., Inc.)
2:30 – 2:45 PM	87	Navigating a Sustainable Future for Sub and Transmission Substations Without SF: High-voltage EconiQ Portfolio, Towards a Carbon-Neutral Future Presenter: Terrence Neo (Hitachi Energy)
2:45 – 3:00 PM	134	Factors Influencing the Development of a Hydrogen Economy Presenter: Tiran Fernando (DNV AS)
3:00 – 3:15 PM	355	Electricity-Hydrogen Integration for Advancing Carbon Peak and Neutrality in China Presenter: Si Jipeng (China Huaneng Group Co., Ltd)
3:15 – 3:30 PM	414	Challenges of Thermal Power Dominated Power System to Achieve Carbon-Neutral Presenter: Zongtai Li (Xi'an Thermal Power Research Institute Co., Ltd.)
3:30-3:45 PM	108	Research on prominent issues and optimization pathways in the development of shared energy storage systems Presenter: Yi Liu (State Nuclear Power Engineering Planning and Design Research Institute Chongqing Co., Ltd.)
3:30 PM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C1: Digitalisation and Data Analytics for Grid Management and Reliability

Sub-track: C.1 Energy and Distribution Management Systems (EMS, DMS, SCADA) & Data Analytics

Session Chair: Sandeep Singh, SP Group

Date: 31 October 2025, Friday

Time: 11:00 – 12:00 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4713

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	162	Adopting Digital Technology in Legacy Substation Automation through DNP/IP Communication Presenter: John Paul Borito [Manila Electric Company (MERALCO)]
11:15 – 11:30 AM	10	Maintaining Medium Voltage Network Reliability Using Distribution Control Multi-Disciplinary Approach for Fault Identification and Rectification Presenter: Yeow Leong Yeo [SP Group]
11:30 – 11:45 AM	213	Enhancing Low-Voltage Network Resilience through Grid-Edge Computing and Advanced Monitoring Presenter: Sebastian Lindmark [EA Technology]
11:45 – 12:00 PM	136	Modernising Grid Operations: A CIM-Based Model Approach Leveraging Graph Databases and Generative AI Presenter: Stephen Najor [Oracle Corporation]
12:00 PM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C3: Advances in Substation Digitalisation, Automation, and Cybersecurity

Sub-track: C.3 Power Plant Digitalisation, Automation, and Cybersecurity & C.4 Integrated, Self-Healing Systems

Session Chair: Sandeep Singh, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:00 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4713

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	325	Experiences and Lessons Learned from Deploying Singapore’s Pilot IEC 61850-Based Digital Substation Project Presenter: Max Zheng (SP Powergrid Ltd)
9:00 – 9:15 AM	342	Improving Reliability and Maintainability of IEC61850-based Digital Control Systems for Power Substations: A Review of Maintenance Records, Operation Challenges, Integration of Advanced Remote Terminal Units, and Standardization Efforts Presenter: Chao Chi Man & Yuen Kin Tong (Companhia de Electricidade de Macau)
9:15 – 9:30 AM	449	Hybrid CNN-LSTM-Transformer Model for Governor Oil Pump Load Duration Forecasting of Pumped Storage Power Station Presenter: Gong Yu (China Southern Power Grid Co., Ltd.)
9:30 – 9:45 AM	406	LoRa Terminal Network Access Authentication Technology Based on Radio Frequency Fingerprint Presenter: Sun Hao (Kunming Bureau of CSG EHV Transmission Company)
9:45 – 10:00 AM	95	Self-Healing by Remote Terminal Unit of SCADA Presenter: Herman Man Tsun Yin (CLP Power Hong Kong Limited)
10:00 AM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C2.1: DER Integration and Grid Modernisation

Sub-track: C.2 Smart Grid and Microgrid Applications and Technologies & C.9 Demand Response (Demand Side Management) and Flexible Load Management

Session Chair: Er Tan Ru Chen, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:30 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4712

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	47	Improving the Integration of Distributed Energy Resources (DERs) in Thailand's Power Grid Using Automatic Voltage Regulator Distribution Transformers (AVRDT) Presenter: Suphanut Satarworn (Provincial Electricity Authority)
9:00 – 9:15 AM	180	Flexibility-Driven DERMS: A Multi-Agent Approach for Optimized Distributed Energy Resource Integration in Modern Power Grids Presenter: Kin Hey Chu (SP Group)
9:15 – 9:30 AM	225	Research on Multi-type Resource Coupling Operation and Scheduling Strategy for Distributed Photovoltaic Intelligent Distribution Network Presenter: Ge Wang (State Grid Corporation of China (SGCC))
9:30 – 9:45 AM	338	Optimizing DER Integration with a Smarter Grid: Distribution Network's Approach to Energy Transition, Smart Communities, and Grid Modernization Presenter: Komal Deep Kaur Hardial Singh (Tenaga Nasional Berhad)
9:45 – 10:00 AM	104	NextGen GridOps Framework Accelerates Utilities' Smart Grid Transformation Presenter: Xiaoning Liang (DNV AS)
10:00 - 10:15 AM	327	Introduction of Regional Power Grid Battery Storage Project Presenter: Yu-Hsuan Tai (Taiwan Power Company)
10:15 – 10:30 AM	344	Supporting the Decarbonisation of Hong Kong: The Role of Battery Energy Storage System for a Resilient Low Voltage Grid Presenter: Michael Tsz Him Kwong (CLP Power Hong Kong Limited)
10:30 AM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C2.2: Smart Grid Control, Stability and Optimisation Technologies

Sub-track: C.2 Smart Grid and Microgrid Applications and Technologies & C.9 Demand Response (Demand Side Management) and Flexible Load Management

Session Chair: Dr Tommy Halim, Maschinenfabrik Reinhausen GmbH

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4712

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	94	Analysis on the Operation Scenarios and Test Procedure of Green Island Microgrid Moving Towards a Zero-Carbon Island Presenter: Chen-Yu Chien (Taiwan Power Company)
11:15 – 11:30 AM	296	Research on Green Micro-grid Dispatching Based on the Integration of Diversified Resources Presenter: Fan Guoqi, State Grid Corporation of China (SGCC) [on behalf of Ren CHong]
11:30 – 11:45 AM	297	Research on the dispatching of virtual power plants for the aggregation of multiple flexible resources Presenter: Fan Guoqi (State Grid Corporation of China (SGCC))
11:45 – 12:00 PM	53	Implementation Techniques of Flexible Overload-shedding Function for Transmission Transformers in MEA's Power Distribution System Presenter: Pichit Jintagosonwit (Metropolitan Electricity Authority)
12:00 – 12:15 PM	457	Research on Power Stability Control Technology of Smart Grid Under Security Reinforcement Learning Presenter: Yingda Chen (China Southern Power Grid Co., Ltd)
12:15 – 12:30 PM	50	SOGI-Based Virtual Flux Oriented Control for Grid-Forming Converters Presenter: Yun Yang (Nanyang Technological University)
12:30 PM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C6: AMI and Smart Meter Applications

Sub-track: C.6 Smart Metering and Advanced Metering Infrastructure (AMI)

Session Chair: Er Tan Teck Lee, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:15 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4611

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	97	Application of Bluetooth Interface for Smart Meter Operations: A Multi-Layered Security Approach Presenter: Che-I Lin (Taiwan Power Company)
9:00 – 9:15 AM	158	Enabling AMI Connectivity by Specially Designed Antenna Presenter: Ho Homan (CLP Power Hong Kong Limited)
9:15 – 9:30 AM	207	Use of Smart Meter Data to Detect Open Neutral Statuses Presenter: Chi Fai Chan (The Hongkong Electric Company)
9:30 – 9:45 AM	299	Leveraging Advanced Metering Infrastructure for Enhanced Network Visibility and Distributed Energy Resource Integration: TNB's Strategic Approach Towards Malaysia's Energy Transition Presenter: Syed Ahmad Fuad Syed Abdul Hamid (Tenaga Nasional Berhad)
9:45 – 10:00 AM	353	Exploration of Smart Services and Smart Grid in Macau based on CEM AMI Presenter: Wong Hou Wa, Oscar & Ho Chon Hei, Henry (Companhia de Electricidade de Macau)
10:00 – 10:15 AM	402	Handling Large-Scale Smart Meter Data in a Low-Resource Environment: A Scalable Machine Learning Pipeline for Fault Detection and Predictive Maintenance Presenter: Farhana binti Abdul Hadi (Tenaga Nasional Berhad)
10:15 AM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C7: EV Charging and V2G Technologies

Sub-track: C.7 Electric Vehicles (EVs), Charging Infrastructure, and Vehicle-to-Grid (V2G) Technologies & C.9 Demand Response (Demand Side Management) and Flexible Load Management

Session Chair: Dr Sivaneasan Bala Krishnan, IEEE PES

Date: 31 October 2025, Friday

Time: 1:30 – 3:15 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4611

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	203	Securing Commercial Distributed Electric Vehicle Charge Point Operation Presenter: Sukoco, DNV AS (on behalf of Wei Ming Quek)
1:45 – 2:00 PM	300	Building a Reliable and Secure Communication Environment for Electric Vehicles Charging Network in MACAU Presenter: Lei Sao Ha, Maggie, & Leong Lan Lan Kitty, Companhia de Electricidade de Macau (on behalf of Hang Chan)
2:00 – 2:15 PM	445	Optimization Scheduling of Electric Vehicle Charging Stations Based on Multi-Agent Reinforcement Learning Presenter: Qingchan Liu, China Southern Power Grid Co., Ltd. (on behalf of Qi Wang)
2:15 – 2:30 PM	509	Off-Grid Solar-Powered EV Charging: Enhancing Energy Independence and Sustainability for Electric Fleets Presenter: Shafirah Binti Nor Din (Tenaga Nasional Berhad)
2:30 – 2:45 PM	123	Construction and Application of the Interactive System between Electric Vehicles and Distribution Network Based on "Cloud-Edge" Collaboration Presenter: Xinyang Wang (State Grid Corporation of China (SGCC))
2:45 – 3:00 PM	520	EleX by EGAT, EV Charge Point Operator in Thailand Presenter: Surisa Sangdee, Electricity Generating Authority of Thailand (on behalf of Pichit Phongprasert)
3:00 – 3:15 PM	526	BackEN EV, EV Charging Management Platform in Thailand Presenter: Phawini Naksila, Electricity Generating Authority of Thailand (on behalf of Warangkana In-lao)
3:15 PM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C8: Microgrid Design, Operation, and Control

Sub-track: C.8 Microgrid Design, Operation, and Control

Session Chair: Dr Sivaneasan Bala Krishnan, IEEE PES

Date: 31 October 2025, Friday

Time: 11:00 – 12:15 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4611

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	31	Microgrids for Resilient Distributed Power Presenter: Fathur R Handoko, INNIO Jenbacher GmbH & Co OG (on behalf of Klaus Payrhuber)
11:15 – 11:30 AM	106	Trial of grid storage batteries control for rural microgrid areas to reduce the impact of renewable energy Presenter: Yosuke Higashi (Chubu Electric Power Grid Co., Inc.
11:30 – 11:45 AM	351	Challenges And Successful Completion Of Upgrading Emergency Generator System Into Microgrid Presenter: Lin Meng Chua (Singapore Polytechnic)
11:45 – 12:00 PM	416	Coordinated Optimal Scheduling Method for Distribution Systems Based on the Analytic Target Cascading (ATC) Method Presenter: Nan Ning (China Southern Power Grid Co., Ltd.)
12:00 – 12:15 PM	546	Collaborative Operation of Electric Sales Business and Park-Level Integrated Energy System Under the New Market Environment Presenter: Shaomin Wang (China Huaneng Group Co., Ltd)
12:15 PM		Closing and Attendance Photo Taking

Track C: Smart Grid, Microgrid & Distributed Energy Technologies

Session C10: Renewable Integration and Grid Stability

Sub-track: C.10 Renewable Integration and Grid Compatibility

Session Chair: Er Tan Ru Chen, SP Group

Date: 31 October 2025, Friday

Time: 1:30 – 3:05 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4713

Programme

TIME	ID	PAPER TITLE
1:30 – 1:35 PM		Opening Remarks Mr Stephen Yee, SM SCD, Sarawak Energy Berhad
1:35 – 1:50 PM	46	RE Forecasting Implementation and Challenges for Distribution System Operator Presenter: Chanon Phaepilin (Metropolitan Electricity Authority)
1:50 – 2:05 PM	56	Short-term voltage stability analysis of hybrid renewable energy systems with composite loads Presenter: Mike Hng Ming Yang (SP Group)
2:05 – 2:20 PM	75	Increasing PV Hosting Capacity by using Voltage Support of Smart Inverters in MEA's LV Distribution Systems Presenter: Wuttichai Saranrom (Metropolitan Electricity Authority)
2:20 – 2:35 PM	194	Grid Code Compliance and Performance Optimization in Utility-Scale Solar PV Plants Using On-Load Tap-Changers Presenter: Waqas Hussain (Maschinenfabrik Reinhausen GmbH)
2:35 – 2:50 PM	292	Best Practices and Lessons in LV DERMS Implementation Presenter: Nicholas Phillips (Itron)
2:50 – 3:05 PM	238	Practical approach on protection coordination of medium voltage network with embedded generation Presenter: K.P.J. Prabhath Premathilake (Ceylon Electricity Board)
3:05 PM		Closing and Attendance Photo Taking

Track D: Electricity Sales & Customer Experience

Session D1: Customer Experience and Retail Digital Transformation

Sub-tracks: D.1 Customer-Side Energy Efficiency Management, D.2 Demand Response and Customer Interaction, D.3 Innovation in Retail Electricity and Customer Services, D.4 Integrated Customer Energy Management Solutions & D.5 Decentralised and Peer-to-Peer (P2P) Energy Trading

Session Chair: Matthew Gleeson, Oracle

Date: 30 October 2025, Thursday

Time: 2:00 – 3:30 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5002

Programme

TIME	ID	PAPER TITLE
2:00 – 2:15 PM	110	CLP ONE - Customer Smart Energy Management Transformation in Hong Kong Presenter: Tracey Chan, CLP Power Hong Kong Limited (on behalf of C. H. Yuen)
2:15 – 2:30 PM	387	From Data to Decisions: Enhancing Customer Experience with Data Driven Energy Insights Presenter: Nur Shuhada Abdullah (Tenaga Nasional Berhad)
2:30 – 2:45 PM	166	Meralco's Customer Experience Index: Enhancing CX through Innovative Measurement Programs Presenter: Aldrich Salen (Manila Electric Company (MERALCO))
2:45 – 3:00 PM	438	Construction and Application of Customer Services Satisfaction Index Model of Electric Vehicle Charging Infrastructure: An Empirical Study of Five Provinces in Southern China Presenter: Junmin Zhang (China Southern Power Grid Industrial Investment Group Co., Ltd)
3:00 – 3:15 PM	557	Transforming Electricity Billing and Contracting for Seamless Solar Adoption: The TNBX Approach Presenter: Sharifah Salwah Binti Syed Othman (Tenaga Nasional Berhad)
3:15 – 3:30 PM	444	VEM: Enabling Smart Energy Ecosystem Presenter: Muhammad Ibrahim Rozman (Tenaga Nasional Berhad)
3:30 PM		Closing and Attendance Photo Taking

Track D: Electricity Sales & Customer Experience

Session D2: Operational Efficiency and Smart Energy Technologies

Sub-track: D.1 Customer-Side Energy Efficiency Management, D.2 Demand Response and Customer Interaction, D.3 Innovation in Retail Electricity and Customer Services & D.4 Integrated Customer Energy Management Solutions

Session Chair: Matthew Gleeson, Oracle

Date: 30 October 2025, Thursday

Time: 4:00 – 5:45 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5002

Programme

TIME	ID	PAPER TITLE
4:00 – 4:15 PM	100	Identification and Replacement of High Energy-Consuming Home Appliances Presenter: Li-Hsin Chang (Taiwan Power Company)
4:15 – 4:30 PM	54	5G-based Cooling Load Prediction Information System of Air Conditioning for Decarbonisation in Shopping Mall Presenter: Simon Tsui (CLP Power Hong Kong Limited)
4:30 – 4:45 PM	466	Demand Response in Malaysia: Strategic Implementation and Regulatory Considerations Presenter: Aznan Ariffin (Tenaga Nasional Berhad)
4:45 – 5:00 PM	283	The Application of Three-Phase Inverters for Solar Power Generation and Energy Management Presenter: Palakorn Jukseda (Provincial Electricity Authority)
5:00 – 5:15 PM	101	MEA Test Data Generator for Government Discount Calculation Presenter: Sayompoo Pieamsang (Metropolitan Electricity Authority)
5:15 – 5:30 PM	44	GIS Mobile Workforce Application for Enhancing MEA's Customer Service Presenter: Paphawee Tungduangdee (Metropolitan Electricity Authority)
5:30 – 5:45 PM	564	Enhancing Field Service Efficiency through Mobile Workforce Management: A Case Study of Sabah Electricity Presenter: Aminah Ahmad (Sabah Electricity Sdn Bhd)
5:45 PM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E1: Industry 4.0 Applications in Power Systems

Sub-track: E.1 Emerging Technologies and Industry 4.0 in the Power Sector

Session Chair: Bryan Lee Zhen Yuan, SP Group

Date: 31 October 2025, Friday

Time: 8:45 – 10:30 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4612

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	286	Visualizing the Future of a Modern Distribution Control Centre as a Central Digital Hub of Information for Control Operators within Singapore Presenter: Bryan Lee [SP Group]
9:00 – 9:15 AM	479	Application of Smart Utility Maturity Assessment (SUMA) Model in Distribution Network of Tenaga Nasional Berhad (TNB), In Support of Malaysia's Energy Transition Journey Presenter: Malveen Kaur A/P Madan Mohan Singh [Tenaga Nasional Berhad]
9:15 – 9:30 AM	301	Trustable AI Framework for Intelligent Meter Monitoring: A Multi-Agent, LLM-Driven Approach Presenter: Tiantian Guo [SP Group]
9:30 – 9:45 AM	287	Real-Time Risk Alarm Detection System: A Case Study in Meralco Distribution System Addressing Power Reliability and Safety on Building Work Sites (BWS) Presenter: Ryannel Sy [Manila Electric Company [MERALCO]]
9:45 – 10:00 AM	43	Research and Development of Switching Operation Robot for High-Voltage Power Systems Presenter: Zihuang Lin [China Three Gorges Corporation [CTG]]
10:00 – 10:15 AM	568	Utilizing Drone for High-Voltage Transmission and Distribution Line Inspection and Regulatory Compliance Challenges Presenter: Chai Kim Thai [Sarawak Energy Berhad]
10:15 – 10:30 AM	126	Invertnity: Automated Application for Solar PV Inverter Testing Presenter: Pannawat Charoenwithu [Metropolitan Electricity Authority]
10:30 AM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E2: ICT Innovation and Integrated Systems for Utilities Operations

Sub-track: E.2 ICT Innovations in Corporate Management

Session Chair: Dr Sheik Fareed Muhammad Musthafa Roomi , IEEE PES

Date: 30 October 2025, Thursday

Time: 2:00 – 3:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5003

Programme

TIME	ID	PAPER TITLE
2:00 – 2:15 PM	570	Fusion Centre: An Integrated Approach to Security Operations Presenter: Steve Lee Hee Kwang, SP Group (on behalf of Y. C. Wong)
2:15 – 2:30 PM	167	Brightstream App: Revolutionizing Meralco's Streetlight Management Presenter: Yvonne Jazzey Melo (Manila Electric Company (MERALCO))
2:30 – 2:45 PM	175	Flying Connection Detection and Recovery Presenter: Clairol Sagaysay (Manila Electric Company (MERALCO))
2:45 – 3:00 PM	483	Innovative Enterprise Think Tank Enhancing Value Creation Mechanisms Presenter: Yaqiong Tan (China Shenhua Energy Company Limited)
3:00 – 3:15 PM	189	Overcoming Key Challenges in HK Electric's GIS Transformation Journey Presenter: Chris Poon (The Hongkong Electric Company)
3:15 – 3:30 PM	551	Implementation of a Blackstart Cranking Path Sequence Operation through PMU Presenter: Chirag Mistry (GE Vernova)
3:30 PM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E3: Cybersecurity and Secure Communications for Power Systems

Sub-track: E.3 Telecommunications and Cybersecurity for Critical Infrastructure

Session Chair: Dr Sheik Fareed Muhammad Musthafa Roomi , IEEE PES

Date: 30 October 2025, Thursday

Time: 4:00 – 5:15 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5003

Programme

TIME	ID	PAPER TITLE
4:00 – 4:15 PM	29	A Practical Way of Defending Critical Infrastructure in the Power Sector Against Cyber Attacks Presenter: Ethan Seow (Practical Cyber)
4:15 – 4:30 PM	393	Research on Cybersecurity Situational Awareness Technology for New-generation Power Systems Presenter: TBC (on behalf of B. Yu)
4:30 – 4:45 PM	103	Reevaluating the Role of Data Diodes in Modern OT Security Presenter: Wei Ming Quek (DNV AS)
4:45 – 5:00 PM	164	Our Initiatives to Visualization of Cybersecurity Skills and Penetration Testing for Control Systems Presenter: Kakeru Kashima (Chubu Electric Power Co., Inc.)
5:00 – 5:15 PM	304	Hitless redundancy protection for line differential protection communications with active multipath pseudowire over IP/MPLS Presenter: Dominique Verhhulst, & Ali Emam (Nokia)
5:15 – 5:30 PM	429	450 MHz Spectrum for Power Utilities: Unlocking the Potential of Wide-Area Private Networks Presenter: Khairul Azhar Bin Ishak (Tenaga Nasional Berhad)
5:30 PM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E4: Digital Utilities, IoT and Data Integration for Power Networks

Sub-track: E.4 Digital Utilities and the Internet of Things (IoT)

Session Chair: Dr Can Berk Saner, IEEE PES

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4612

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	312	Digital Transformation of Power Network Work Management with Modern Work Presenter: Wai Kit Eric So (Companhia de Electricidade de Macau)
11:15 – 11:30 AM	190	Automating the Distribution Switchgear Operation Time Measurement in DMS RTU Presenter: Benny Cheung, The Hongkong Electric Company (on behalf of J. Chung)
11:30 – 11:45 AM	258	Data Accessibility as a Driver for Remote HV Asset Monitoring Presenter: Stephan Sehestedt (Hitachi Energy)
11:45 – 12:00 PM	527	Toward Seamless IoT Interoperability for Energy and Mobility Integration: A Systemic Perspective Presenter: Wen Hanguan (China Southern Power Grid Co., Ltd.)
12:00 – 12: 15 PM	293	Space Technology Approach for Catchment Area Surveillance in Peninsular Malaysia Presenter: Mohd Syazuan Kamarulzaman (Tenaga Nasional Berhad)
12:15 – 12:30 PM	226	Uberization of Electric Service Application: The Private Electric Contractors Certified By Meralco (PECCBM) Platform Presenter: Virgo Ramil Ruaro (Manila Electric Company [MERALCO])
12:30 PM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E5.1: AI Applications in Power System Operations and Asset Management

Sub-track: E.5 Artificial Intelligence (AI) and Large Language Models (LLMs) & E.7 Virtual Reality (VR) and Augmented Reality (AR)

Session Chair: Dr Sivaneasan Bala Krishnan, IEEE PES

Date: 31 October 2025, Friday

Time: 8:45 – 10:20 am

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4613

Programme

TIME	ID	PAPER TITLE
8:45 – 8:50 AM		Opening Remarks Jacky Wang, Vice President, Electric Power Digitalization BU, Huawei
8:50 – 9:05 AM	373	AI-Driven Acoustic Analysis for Partial Discharge Detection Presenter: Nicholas Liang Yung Wong, [SP Group]
9:05 – 9:20 AM	243	Enhancing Transformer Condition Monitoring with AI: A Hybrid Approach Using Offline and Online Data Presenter: Tommy Halim [Maschinenfabrik Reinhausen GmbH]
9:20 – 9:35 AM	138	Optimizing System Loss Reduction through Data-Driven Inspection Deployment: A Cluster-Level Electricity Theft Analysis Approach Presenter: Juan Miguel Bunagan [Manila Electric Company (MERALCO)]
9:35 – 9:50 AM	98	Uncovering Hidden Electric Vehicle Loads by Transfer Learning Technique Presenter: Binnie Wai Keung Yiu [CLP Power Hong Kong Limited]
9:50 – 10:05 AM	82	GEOAI–Automated Detection of Solar Panels Using Deep Learning for Detecting Unregistered On-Grid Solar Panels Presenter: Thitiporn Intarabamroong [Metropolitan Electricity Authority]
10:05 – 10:20 AM	415	Application of Artificial Intelligence in Hydropower Operation Automation Presenter: Ming Li, China Huaneng Group Co., Ltd [on behalf of Bo Zhang]
10:20 AM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E5.2: Generative and Knowledge-Based AI in Utilities

Sub-track: E.5 Artificial Intelligence (AI) and Large Language Models (LLMs)

Session Chair: Dr Koh Ngiap Tiam, IEEE PES

Date: 31 October 2025, Friday

Time: 11:00 – 12:30 pm

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4613

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	486	A Large Model of Modal Perception of Power Technology Practical Operation Status Based on Knowledge Graph Presenter: Peiyang Li (China Southern Power Grid Co., Ltd.)
11:15 – 11:30 AM	476	Research on an Ontology-Enhanced Intelligent Query System for Power Equipment Based on IEC61970/61968 Standards Presenter: x]
11:30 – 11:45 AM	528	Success and learnings from use of Large Language models in Power sector Presenter: Bailing Zhang, CLP Power Hong Kong Limited (on behalf of Hiok Song Er)
11:45 – 12:00 PM	48	Enhanced Retrieval-Augmented Generation for Intelligent Customer Service in Electricity Utility Sector: A Case Study of MEA's DTD Doc Insight System Presenter: Panisit Fuangfung (Metropolitan Electricity Authority)
12:00 – 12:15 PM	131	Domain-Specific Contract Analysis: LLMs vs. Engineers in Power Plant TOR Review Presenter: Krit Kongurai (Electricity Generating Authority of Thailand)
12:15 – 12:30 PM	146	Task Assignment AI Assistant: Enhancing Administrative Staff and Fieldworker Efficiency with Reasoning LLMs and Speech Interaction Presenter: Denise Ann Mayores (SP Group)
12:30 PM		Closing and Attendance Photo Taking

Track E: ICT's Innovation in the Power Sector

Session E5-7: Intelligent Systems, Field Assistance and Operational Innovation

Sub-track: E.4 Digital Utilities and the Internet of Things (IoT), E.5 Artificial Intelligence (AI) and Large Language Models (LLMs), E.6 Digital Twins for Energy Systems & E.7 Virtual Reality (VR) and Augmented Reality (AR)

Session Chair: Dr Koh Ngiap Tiam, IEEE PES

Date: 31 October 2025, Friday

Time: 1:30 – 3:00 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 4612

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	345	AI-Driven Training and Decision Support for Nuclear Power Plant Operators Presenter: Shu Wang (Fujian Ningde Nuclear Power Co.,Ltd)
1:45 – 2:00 PM	68	AI Buddy - Concept of Using AI/AR Assistance for Switching Operations on Distribution Assets Presenter: Tiong Hee Peh (SP Group)
2:00 – 2:15 PM	85	Emerging Risks of Electricity Theft in Bitcoin Mining: A Case Study of MEA Presenter: Phitiwat Lopyim (Metropolitan Electricity Authority)
2:15 – 2:30 PM	540	Success and Learnings from Use of Large Language Models in Power Sector Presenter: Mingjie Xu (Nari Technology)
2:30 – 2:45 PM	441	Research on the Synergistic Effect of Precise Quantitative Management of Coal and Dynamic Early Warning Intelligent System for Spontaneous Combustion Disasters Presenter: Sun Zhe (China Energy Investment Corporation Limited)
2:45 – 3:00 PM	140	Decoupling Human-AI Collaboration for the Application of Large Models in the Power Industry Presenter: Haidan Wang, State Power Investment Corporation Limited (SPIC) [on behalf of Wentao Mo]
3:00 PM		Closing and Attendance Photo Taking

Track F: Developments in Sustainable Power

Session F2.1: Decarbonisation and Renewable Transition Strategies

Sub-track: F.2 Power Generation Planning and Energy Transition Goals

Session Chair: Dr Lee Sze Sing, IEEE PES

Date: 30 October 2025, Thursday

Time: 4:00 – 5:45 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5102

Programme

TIME	ID	PAPER TITLE
4:00 – 4:15 PM	256	Feed-in Tariff (FIT) System To Green Energy Auction Program (GEAP): The Philippines' Strategic Move Toward Competitive Renewable Energy Market Presenter: Rogelyn T. Ronquillo [National Transmission Corporation [TransCo]]
4:15 – 4:30 PM	496	Leading a renewable energy revolution: MGreen's role in accelerating the Philippines' RE ambitions Presenter: George Jaime Esmeralda [Manila Electric Company [MERALCO]]
4:30 – 4:45 PM	78	Pathways to Decarbonise Power Generation in Hong Kong through Potential Technologies to Achieve Carbon Neutrality by 2050 Presenter: Man Yuk Leong [CLP Power Hong Kong Limited]
4:45 – 5:00 PM	155	Powering the Philippine Energy Transition Program Through Distribution Utilities' Energy Sourcing Presenter: Wesley Navarro [Manila Electric Company [MERALCO]]
5:00 – 5:15 PM	160	Feasibility Study of Nearshore Offshore Wind Power Development in Macau Under Dual Carbon Targets Presenter: Jimmy Leong [Companhia de Electricidade de Macau]
5:15 – 5:30 PM	215	Suitability and Investment Map of Variable Renewable Energy Power Plants in Thailand Presenter: Naraset Sinsang [Electricity Generating Authority of Thailand]
5:30 PM		Closing and Attendance Photo Taking

Track F: Developments in Sustainable Power

Session F2.2: System Planning, Optimisation and Infrastructure Resilience

Sub-track: F.1 Cross-Border Power Interconnection and Power Trading & F.2 Power Generation Planning and Energy Transition Goals

Session Chair: Sandeep Singh, SP Group

Date: 31 October 2025, Friday

Time: 1:30 - 3:30 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5102

Programme

TIME	ID	PAPER TITLE
1:30 – 1:45 PM	488	Cross-Border Power Interconnection: Lesson Learn from the Thailand–Laos Experience Presenter: Anucha Lekkrusuwan (Electricity Generating Authority of Thailand)
1:45 – 2:00 PM	534	Fly Ash Carbon Content Prediction and Combustion Optimization Adjustment Based on Artificial Intelligence Presenter: Ruwei Hou (China Huaneng Group Co., Ltd)
2:00 – 2:15 PM	57	Seismic Hazard Assessment for Hydropower Dams in Peninsular Malaysia Presenter: Mohd Rashid bin Mohd Radzi (Tenaga Nasional Berhad)
2:15 – 2:30 PM	145	Study on Island Grid Interconnection Masterplan Presenter: Jomel Cristobal (National Transmission Corporation (TransCo))
2:30 – 2:45 PM	380	Research on the Hydropower Group Clearing Model of Southern Regional Electricity Spot Market Presenter: Hongqiao Peng (China Southern Power Grid Co., Ltd.)
2:45 – 3:00 PM	427	Integrating Data Centers into Scenario Planning for a Resilient Power System Planning in Peninsular Malaysia Presenter: Jusey Reccla Mojingku (Tenaga Nasional Berhad)
3:00 – 3:15 PM	395	Integrating Climate Change Effects on Energy Systems Infrastructure Planning Models Presenter: Vijay Naga Mohan Krishna P Pothabathula (Hitachi Energy)
3:15 – 3:30 PM	122	Research on Optimal Allocation of Integrated Cooperative System of Source Network and Load Storage Under Dual Carbon Target Presenter: Zhaoxian Nie (State Nuclear Power Engineering Planning and Design Research Institute Chongqing Co., Ltd.)
3:30 PM		Closing and Attendance Photo Taking

Track F: Developments in Sustainable Power

Session F3: Integration of Variable Renewable Energy

Sub-track: F.3 Integration of High Shares of Variable Renewable Energy (VRE)

Session Chair: Dr Tan Kuan Tak, IEEE PES

Date: 31 October 2025, Friday

Time: 11:00 – 12:45 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5102

Programme

TIME	ID	PAPER TITLE
11:00 – 11:15 AM	305	Advancing Malaysia's Energy Transition through Responsible Variable Renewable Energy Integration Presenter: Zhao Liang Wee (Tenaga Nasional Berhad)
11:15 – 11:30 AM	506	Optimizing Wind Energy Deployment in Malaysia: A Techno-Economic Perspective Presenter: Mohd Azimin Elias (Tenaga Nasional Berhad)
11:30 – 11:45 AM	289	Enhancing Power Quality in Renewable Energy through Hybrid Solutions Presenter: C M Kumar (Hitachi Energy)
11:45 – 12:00 PM	366	Battery Energy Storage System Optimization in the Philippine Grid Operations with Significant Level of Variable Renewable Energy Presenter: Neil Martin E. Modina (National Grid Corporation of the Philippines)
12:00 – 12:15 PM	129	Digital Twin for Inverter-Based Power Grids Presenter: Thiraphat Likitkumjorn (Electricity Generating Authority of Thailand)
12:15 – 12:30 PM	405	Challenges and Suggestions for China's Distributed Photovoltaic Participation in the Electricity Market Presenter: Tong Guo (China Huaneng Group Co., Ltd)
12:30 – 12:45 PM	254	Beijing Yizhuang's Exploration and Practice of Piloting a New Smart Energy Ecology for Future Cities Presenter: Bing Yuan (State Grid Corporation of China [SGCC])
12:45 PM		Closing and Attendance Photo Taking

Track F: Developments in Sustainable Power

Session F4: Grid Flexibility Requirements and Solutions

Sub-track: F.4 Flexibility Requirements and Solutions for Enhanced Grid Flexibility & F.5 Decentralised and Distributed Energy Systems (VPP)

Session Chair: Dr Can Berk Saner, IEEE PES

Date: 31 October 2025, Friday

Time: 8:45 – 10:45 AM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5102

Programme

TIME	ID	PAPER TITLE
8:45 – 9:00 AM	363	Exploration on the Planning and Development Technologies of Source-Grid-Load-Storage Integration and Multi-Energy Complementation Presenter: Junjie Kang [China Huaneng Group Co., Ltd]
9:00 – 9:15 AM	62	Flexible Energy Systems: “Consumer centricity is the key” Presenter: Santhosh Sivaraman Nair [Oracle Corporation]
9:15 – 9:30 AM	64	Grid-scale Hong Kong Battery Energy Storage System (HKBESS) to Smooth out the Demand Peak in a Green Manner Presenter: Kaushal Vaishnav [CLP Power Hong Kong Limited]
9:30 – 9:45 AM	347	Mobile Substations: A Critical Asset for Emergency Power Grid Solutions Presenter: Claudio Spella [Hitachi Energy]
9:45 – 10:00 AM	113	A Private-Public Partnership Practice for the Grid Resilience Enhancement: Taiwan’s Ancillary Service Market Presenter: Yen-Chi Huang [Taiwan Power Company]
10:00 – 10:15 AM	208	Implementation Consideration for Customer-side DERMS Presenter: Ivan Christian [DNV AS]
10:15 – 10:30 AM	224	Strategy for the Dispatch of Virtual Power Plants in Industrial Zones Based on a Quantitative Assessment Model of Adjustment Costs Presenter: Zhao Wanying, State Grid Corporation of China [SGCC] (on behalf of QiZhao Zhang)
10:30 – 10:45 AM	60	Generation Units Dispatch Optimisation to Enable Fuel Cost Savings Presenter: Leo Shing Ho Yu [CLP Power Hong Kong Limited]
10:45 AM		Closing and Attendance Photo Taking

Track F: Developments in Sustainable Power

Session F6-7: ESG, Sustainable Financing and Stakeholder Engagement

Sub-track: F.6 Sustainable Power Financing and Policy F.7 Environmental and Social Impacts of Renewable Power Development

Session Chair: Dr Koh Ngiap Tiam, IEEE PES

Date: 30 October 2025, Thursday

Time: 2:00 – 3:30 PM

**Please note that the timing is subject to final confirmation.*

Venue: Meeting Room 5102

Programme

TIME	ID	PAPER TITLE
2:00 – 2:15 PM	55	Enhancing Stakeholder Engagement for Sustainable Success in Power Utility Projects: A Case Study of the Metropolitan Electricity Authority Presenter: Rojana Suvarnapunya (Metropolitan Electricity Authority)
2:15 – 2:30 PM	235	Navigating Power Sector Decarbonisation: HK Electric's Journey and Future Regulatory Challenges Presenter: Shing Hei, Garfield Lau (The Hongkong Electric Company)
2:30 – 2:45 PM	198	ESG: A Global Cooperation Path for Sustainable Power Generation Presenter: Gu Yawen (China Three Gorges Corporation [CTG])
2:45 – 3:00 PM	36	The Perception of Stakeholders on The Alternate Design Options For Solar Rooftop Self-Consumption Schemes in Thailand Presenter: Pasapong Gamonwet (Provincial Electricity Authority)
3:00 – 3:15 PM	426	Radiance of Progress: Managing Social Acceptability and Community Engagement of the 3,500MW MTerra Solar Project in Nueva Ecija and Bulacan, Philippines Presenter: Jun Jun San Juan (MGen Renewable Energy Inc.)
3:15 – 3:30 PM	77	Balancing Environment and Energy Needs: Environmental and Social Impacts of Hydro, Solar and Wind Power Development in Sri Lanka Presenter: Geetha Udayakanthi (Ceylon Electricity Board)
3:30 PM		Closing and Attendance Photo Taking