IEEE I&CPS Asia 2023

IEEE IAS INDUSTRIAL AND COMMERCIAL POWER SYSTEM ASIA

Technical Sessions Agenda Overview

China Standard Time

Date	Time	Session	Paper ID	Paper Title
Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid				
Session Chair:				
July. 8	**13:30-13:45**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	1155	Interpolated Average Value Model of Voltage Source Converter for Real-time Simulation
July. 8	**13:45-14:00**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	1899	Adaptive Ensemble Ultra-short Term Forecasting of Wind Power Considering Curtailment Data Identification
July. 8	**14:00-14:15**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	1902	Research on Data Quality Verification Service Based on Power Marketing System
July. 8	**14:15-14:30**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	2010	Hybrid dynamic simulation method of current-controlled voltage sources for dynamic error tracing
July. 8	**14:30-14:45**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	2946	Global Attention-Based Approach for Substation Devices Classification and Localization
July. 8	**14:45-15:00**	Technical Session 1: Smart Grid-Novel Information Technologies for Smart Grid	3047	Toward the Imputation and Prediction of Condition Monitoring Data with Missing Values
Technical Session 2: Flexible Mechanism, Analysis and Control of Power Systems with High Penetration of Renewable Energy				
Session Chair: Jia Liu & Zao Tang & Tingjian Liu				
July. 8	**13:30-13:45**	Technical Session 2: Flexible Mechanism, Analysis and Control of Power Systems with High Penetration of Renewable Energy	174	A Revised Model for Carbon Emission Quotas in Electric Power Sector to Promote Clean Energy Development
July. 8	**13:45-14:00**	Technical Session 2: Flexible Mechanism, Analysis and Control of Power Systems with High Penetration of Renewable Energy	1514	Design of a standard energy block trading mechanism with high percentage of new energy access
July. 8	**14:00-14:15**	Technical Session 2: Flexible Mechanism, Analysis and Control of Power Systems with High Penetration of Renewable Energy	4754	A stochastic optimal planning methodology for user-side energy system with multiple energy forms
July. 8	**14:15-14:30**	Technical Session 2: Flexible Mechanism, Analysis and Control of Power Systems with High Penetration of Renewable Energy	6590	A Robust Model Predictive Control Based Frequency Regulation Approach for Wind-Storage Joint System

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Date	Time	Session	Paper ID	Paper Title
Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration				
Session Chair: Shuanglei Feng & Peng Li				
July. 8	**13:30-13:45**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	1171	Tapping the Power Supply Capability of Electric Heating Load in Virtual Power Plant
July. 8	**13:45-14:00**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	2339	Decentralized Coordinated Robust Dispatch of Multi-area Interconnected Integrated Electricity and Heating System
July. 8	**14:00-14:15**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	2486	Capacity Allocation of the Hybrid Wind-PV-Storage System Based on Improved Fish Swarm Optimization Algorithm
July. 8	**14:15-14:30**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	3030	Payment and Incentive Allocation Method in Demand Response Programs based on Causer Pays Principle
July. 8	**14:30-14:45**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	4438	Establishment of Short-Term Load Forecasting Model Based on Combinatorial Optimization Method
July. 8	**14:45-15:00**	Technical Session 3: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	4582	A Power Grid Capacity Margin Model and Calculation Method Considering the Interaction of Source-Load-Storage
Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration				
Session Chair: Shuanglei Feng & Peng Li				
July. 8	**15:30-15:45**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	5095	High-frequency Oscillation Suppression Strategy Based on Arm Current Feedforward Virtual Damping in SVG for Photovoltaic Plants
July. 8	**15:45-16:00**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	5143	Robust Dispatch of IEHS Considering Interaction Mechanism between Multiple DHNs and EPS

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
July. 8	**16:00-16:15**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	6115	An Algorithm for Demand Response Potential Assessment
July. 8	**16:15-16:30**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	6201	Real-Time Congestion Management of Power Transmission Grid Based on Measurement Data Cleaning Technology
July. 8	**16:30-16:45**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	6432	A Novel Storage Energy Dispatch Improvement Model Based on Chameleon Swarm Algorithm
July. 8	**16:45-17:00**	Technical Session 4: Key Technology of Power Balance Capability Evaluation and Improvement Considering Large-Scale Renewable Energy Integration	7971	Coherency Identification for VSC interfaced DERs Considering Network Topologies

Technical Session 5: Energy Systems-Multi-energy System

Session Chair:

July. 8	**13:30-13:45**	Technical Session 5: Energy Systems-Multi-energy System	5403	Research on Profit Analysis of E-NG Vehicle Charging Station Improved from Split Type
July. 8	**13:45-14:00**	Technical Session 5: Energy Systems-Multi-energy System	635	Integration of Distributed Energy Resources into a Virtual Power Plant–A Pilot Project In Dubai
July. 8	**14:00-14:15**	Technical Session 5: Energy Systems-Multi-energy System	1621	Two-stage Mixed Game for Coordinated Planning of PV capacity in Distribution System with Multiple Integrated Energy Microgrids
July. 8	**14:15-14:30**	Technical Session 5: Energy Systems-Multi-energy System	1901	Analysis of Harmonic Amplification at Grid Connecting Point of An Offshore Wind Farm
July. 8	**14:30-14:45**	Technical Session 5: Energy Systems-Multi-energy System	2562	A Low-carbon Dispatching Framework of Electrified Mobility-on-Demand Fleets
July. 8	**14:45-15:00**	Technical Session 5: Energy Systems-Multi-energy System	2956	Research on Pumped Storage Capacity Allocation of Cascade Hydro-Wind-Solar-Pumped Storage Hybrid System Considering Economy and Operational Stability

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Date	Time	Session	Paper ID	Paper Title
Technical Session 6: Energy Systems-Multi-energy System				
Session Chair:				
July. 8	**15:45-16:00**	Technical Session 6: Energy Systems-Multi-energy System	6866	Frequency-Constrained Dispatching Method for an Integrated Electricity-Heat Microgrid with Synergic Primary Frequency Regulation Resources
July. 8	**16:00-16:15**	Technical Session 6: Energy Systems-Multi-energy System	6957	Study on Day-ahead Optimization Strategy of Integrated Energy System Based on Distributionally Robust Optimization in Electricity Spot Market
July. 8	**16:15-16:30**	Technical Session 6: Energy Systems-Multi-energy System	8178	Chain Reaction Analysis of Integrated Energy System Considering Energy Hub Failures
July. 8	**16:30-16:45**	Technical Session 6: Energy Systems-Multi-energy System	8606	Research on Cost Optimization of Integrated Energy System Based on Power Demand Response
July. 8	**16:45-17:00**	Technical Session 6: Energy Systems-Multi-energy System	9301	Low-carbon Economic Scheduling considering Multiple Park-level Integrated Energy Systems Cooperation in Uncertain Environment
July. 8	**17:00-17:15**	Technical Session 6: Energy Systems-Multi-energy System	9362	Research on Hybrid Energy Management Strategy for zero-carbon ships
Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym				
Session Chair:				
July. 8	**13:30-13:45**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	431	IoT intelligent sensing terminal test platform
July. 8	**13:45-14:00**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	835	Decision-making Support Method for Control Strategies of Hybrid Cascaded MTDC System
July. 8	**14:00-14:15**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	853	Research on the day-ahead dispatch strategy for multi-energy power systems considering wind and PV uncertainty

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Date	Time	Session	Paper ID	Paper Title
July. 8	**14:15-14:30**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	1683	Design and Implementation of Micro Energy Control Unit (MECU) for Utility-scale Renewable Energy Integration
July. 8	**14:30-14:45**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	1765	Agent-based Modeling of Small-scale Clean Energy System using Deep Reinforcement Learning
July. 8	**14:45-15:00**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	3138	Numerical simulation study of power electronic transformer insulation system based on space charge characteristics under combined electrothermal stress
July. 8	**15:00-15:15**	Technical Session 7: Renewable Energy Integration-High Penetration of Renewable Energym	1468	Research on Electric Power Spot Market Settlement Mechanism based on Mid-and-long Term Contract Physical Delivery

Technical Session 8: Power System Engineering--Power System Operation

Session Chair:

July. 8	**13:30-13:45**	Technical Session 8: Power System Engineering--Power System Operation	326	A Sequence Component Based Power Flow Algorithm for Islanded Hybrid AC/DC Microgird
July. 8	**13:45-14:00**	Technical Session 8: Power System Engineering--Power System Operation	498	Uncertainty Quantification of Power Flow in Distributed System Considering the Random and Fuzzy Characteristics
July. 8	**14:00-14:15**	Technical Session 8: Power System Engineering--Power System Operation	1038	Research on Frequency Support Technology of Offshore Wind Farm Based on Improved Grey Wolf Algorithm
July. 8	**14:15-14:30**	Technical Session 8: Power System Engineering--Power System Operation	1252	Analysis on Response Characteristics of Control and Protection Systems in event of Measurement Anomalies for UHVDC Transmission System
July. 8	**14:30-14:45**	Technical Session 8: Power System Engineering--Power System Operation	1698	Resilience Enhancement of Urban Integrated Energy Systems in Ice Storms
July. 8	**14:45-15:00**	Technical Session 8: Power System Engineering--Power System Operation	2105	Study on the Mould Formation Method of High Power Electric Fracturing Pump

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Date	Time	Session	Paper ID	Paper Title
Technical Session 9: Power System Engineering--Power System Operation				
Session Chair:				
July. 8	**15:30-15:45**	Technical Session 9: Power System Engineering--Power System Operation	2877	Research on Vibration of Converter Transformer under DC Bias Magnetism The
July. 8	**15:45-16:00**	Technical Session 9: Power System Engineering--Power System Operation	3544	Research on self-balancing scheduling control strategy for distribution network based on soft open points interconnection
July. 8	**16:00-16:15**	Technical Session 9: Power System Engineering--Power System Operation	4228	Research on operation error detection model of metering device
July. 8	**16:15-16:30**	Technical Session 9: Power System Engineering--Power System Operation	4485	Simulation model building and experimental verification of LCC-S wireless power transfer system applied to autonomous underwater vehicles
July. 8	**16:30-16:45**	Technical Session 9: Power System Engineering--Power System Operation	5080	TCN-LSTNet with Sliding Time Window Featured Short-Term Load Forecasting for Integrated Energy System
July. 8	**16:45-17:00**	Technical Session 9: Power System Engineering--Power System Operation	4906	Distribution network topology identification based on Multi-Prosumer Data
July. 8	**17:00-17:15**	Technical Session 9: Power System Engineering--Power System Operation	5747	Robust Learning-assisted Data-driven Congestion Management via Sparse Sensitivity Estimation
July. 8	**17:15-17:30**	Technical Session 9: Power System Engineering--Power System Operation	7461	Local Management Scheduling Strategy for Uncertainty of Distribution Station Area Based on Low Voltage Flexible DC Interconnection
Technical Session 10: Power System Engineering--Power System Planning				
Session Chair:				
July. 8	**13:30-13:45**	Technical Session 10: Power System Engineering--Power System Planning	2818	Mathematical Analysis of Time-series & Meteorological Factors in Electricity Demand Forecasting Based on Carbon Neutrality

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Date	Time	Session	Paper ID	Paper Title
July. 8	**13:45-14:00**	Technical Session 10: Power System Engineering--Power System Planning	3063	An Improved Scatter Search Algorithm for A Generator Maintenance Scheduling Model Based on Probabilistic Production Simulation
July. 8	**14:00-14:15**	Technical Session 10: Power System Engineering--Power System Planning	3661	Expansion Planning of the Target Connection Mode in Medium Voltage Distribution Network with Complex Connection
July. 8	**14:15-14:30**	Technical Session 10: Power System Engineering--Power System Planning	4666	A theoretical line loss calculation model based on analytic hierarchy method
July. 8	**14:30-14:45**	Technical Session 10: Power System Engineering--Power System Planning	5758	A Medium Voltage Network Planning Method Considering the Probability of Distributed Generation and Flexible Load Rate Constraints
July. 8	**14:45-15:00**	Technical Session 10: Power System Engineering--Power System Planning	9996	The Effect of Renewable Energy Development and Market-oriented Reform on Low-carbon Transformation of Power Industry: An agent-based approach

Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation

Session Chair:

July. 9	**15:30-15:45**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	931	Wind-storage control strategy considering the electro-thermal coupling characteristics of overhead lines
July. 9	**15:45-16:00**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	2466	Research on the evaluation method of aggregation flexibility for multi-node distributed energy storage system
July. 9	**16:00-16:15**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	5077	Comprehensive Evaluation Method of Energy Storage Capacity Configuration Based on Retired Battery Capacity Degradation Model
July. 9	**16:15-16:30**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	6021	Dynamic scheduling method of multi-element energy storage system based on deep reinforcement learning
July. 9	**16:30-16:45**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	6283	Learning-based Micro Energy Storage System Control for Voltage Governance in Rural Areas
July. 9	**16:45-17:00**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	7966	Transient Frequency Coordinated Control Strategy for Wind Farm Augmented With Energy Storage

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Date	Time	Session	Paper ID	Paper Title
July. 9	**17:00-17:15**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	8656	Data Driven Location Strategy of Integrated Storage and Charging Power Station in Highway Network
July. 9	**17:15-17:30**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	9272	Lightweight Data-driven Planning Method for Hybrid Energy Storage Systems
July. 9	**17:30-17:45**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	9312	Optimal Control Strategy of Echelon Battery Energy Storage System Based on Battery Health State
July. 9	**17:45-18:00**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	4770	Design and Application of Mass Hydrogen Energy Storage Peak Regulating Technology
July. 9	**18:00-18:15**	Technical Session 11: Energy Storage Technologies-Energy Storage Planning and Operation	6755	State of Health Estimation for Lithium-ion Batteries by Using Partial Battery Data with A Hybrid Neural Network Model

Technical Session 12: Power System Engineering-Power System Control

Session Chair:

July. 9	**15:30-15:45**	Technical Session 12: Power System Engineering-Power System Control	1201	Research on a Novel Multi Port Energy Router Architecture and Collaborative Control Strategy
July. 9	**15:45-16:00**	Technical Session 12: Power System Engineering-Power System Control	1873	Voltage Support Control Strategy for Distributed Synchronous Condenser Based on an Excitation System with Full-Controlled Devices
July. 9	**16:00-16:15**	Technical Session 12: Power System Engineering-Power System Control	3868	Security and Stability Control Strategy Optimization for Power Grid Load Intensive Area Based on Real-time Simulation
July. 9	**16:15-16:30**	Technical Session 12: Power System Engineering-Power System Control	3957	Optimal Virtual Power Plant Operation and Incentive Compatible Profit Allocation Scheme
July. 9	**16:30-16:45**	Technical Session 12: Power System Engineering-Power System Control	4453	Submodule Capacitor Lifetime Increment Method for Modular Multilevel Converters
July. 9	**16:45-17:00**	Technical Session 12: Power System Engineering-Power System Control	4522	Coordinated Control Strategy for Improving Frequency Stability of UHVDC System

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Date	Time	Session	Paper ID	Paper Title
July. 9	**17:00-17:15**	Technical Session 12: Power System Engineering-Power System Control	8590	An Aggregated Frequency Response Model for Power Systems with Renewables
July. 9	**17:15-17:30**	Technical Session 12: Power System Engineering-Power System Control	8887	Decentralized Robust Emergency Voltage Control of Power System with Large-scale Wind Power Integrated Via VSC-MTDC
July. 9	**17:30-17:45**	Technical Session 12: Power System Engineering-Power System Control	2862	Construction and Model Analysis of Boost Boost Circuit Based on Fuzzy and Cascaded PI Dual Control

Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions

Session Chair: Donghan Feng & Yun Zhou & Hengjie Li

July. 9	**09:00-09:15**	Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions	1424	Equilibrium Analysis for Electricity Market Considering Carbon Emission Trading Based on Multi-agent Deep Reinforcement Learning
July. 9	**09:15-09:30**	Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions	2318	Optimal investment strategy for wind power under electricity-carbon-green certificate trading: based on multi-agent deep reinforcement learning
July. 9	**09:30-09:45**	Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions	4440	Price linkage formulas for medium and long-term interprovincial power contracts
July. 9	**09:45-10:00**	Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions	4664	Identification and Analysis for Price Multiplicity in Multi-interval Real-time Market
July. 9	**10:00-10:15**	Technical Session 13: Multi-market Equilibrium Analysis: Challenges and Solutions	6445	Ancillary Service Market Equilibrium Analysis for Multi-agent Load Aggregators in Distribution System

Technical Session 14: Multi-market Equilibrium Analysis: Challenges and Solutions

Session Chair: Donghan Feng & Yun Zhou & Hengjie Li

July. 9	**10:45-11:00**	Technical Session 14: Multi-market Equilibrium Analysis: Challenges and Solutions	7851	Low-carbon Economic Dispatch of Park Integrated Energy System under Electricity-carbon-green certificate Market

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
July. 9	**11:00-11:15**	Technical Session 14: Multi-market Equilibrium Analysis: Challenges and Solutions	8076	Analysis of market equilibrium under the coupling of carbon market and electricity market
July. 9	**11:15-11:30**	Technical Session 14: Multi-market Equilibrium Analysis: Challenges and Solutions	9200	A P2P Trading Mechanism Participated with Shared Energy Storage Operator Based on Stackelberg Game
July. 9	**11:30-11:45**	Technical Session 14: Multi-market Equilibrium Analysis: Challenges and Solutions	9722	Method of Eliminating Transmission Line Overload in Electricity Spot Market

Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events

Session Chair: Yichen Shen & Heng Zhang & Shenxi Zhang

July. 9	**09:00-09:15**	Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	1347	Short-Term Power Forecasting for Wind Power Generation Under Extreme Weather Conditions
July. 9	**09:15-09:30**	Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	1455	Multi-Scenario Transmission Network Expansion Planning Considering Deep Peak Regulation under Static Security Constrains
July. 9	**09:30-09:45**	Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	1811	Resilience Enhancement Strategies for High Speed Train Traction Motor Power System with Coupled Faults
July. 9	**09:45-10:00**	Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	2135	Resilient Transmission Network Hardening Planning Coordinated with Distribution Network Defensive Strategies Against Typhoons
July. 9	**10:00-10:15**	Technical Session 15: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	4181	The Extraction method of Critical indexes for transmission system with low carbon consideration

Technical Session 16: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events

Session Chair: Yichen Shen & Heng Zhang & Shenxi Zhang

July. 9	**10:45-11:00**	Technical Session 16: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	7743	Robust Coordinated Dispatch Strategy for the Power System with Large Offshore Wind Power Integration Under a Typhoon

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
July. 9	**11:00-11:15**	Technical Session 16: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	8488	Scenario Reconstruction Model for Wind and Photovoltaic Power Considering Spatio-temporal Correlation and Credibility
July. 9	**11:15-11:30**	Technical Session 16: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	8597	A+non-destructive+flaw+detection+diagnosis+model+for+transmission+lines+based+on+UAV+charged+X-ray+intelligent+detection
July. 9	**11:30-11:45**	Technical Session 16: Resilience Enhancement Strategies for The New-type Power System Resist Extreme Events	9724	Rapid Assessment of Distribution Systems Resilience Based on Analytical Method

Technical Session 17: Smart Grid-Microgrid

Session Chair:

July. 9	**09:00-09:15**	Technical Session 17: Smart Grid-Microgrid	2404	A constrained robust optimization for day-ahead scheduling of microgrids with source-demand uncertainty
July. 9	**09:15-09:30**	Technical Session 17: Smart Grid-Microgrid	2518	Interactive Power Prediction Model for Virtual Power Plant Based on Wave-Attention Network
July. 9	**09:30-09:45**	Technical Session 17: Smart Grid-Microgrid	2677	Sampling Aliasing Analysis for Parallel Grid-Tie Inverters Based on Frequency-Domain Model
July. 9	**09:45-10:00**	Technical Session 17: Smart Grid-Microgrid	2756	Monopolar Fault Reconfiguration for Resilient Protection of Bipolar DC Distribution System
July. 9	**10:00-10:15**	Technical Session 18: Smart Grid-Microgrid	4392	Modeling and Simulation for Microgrids with Distributed Energy Resources of Low-carbon Parks

Technical Session 18: Smart Grid-Microgrid

Session Chair:

July. 9	**10:45-11:00**	Technical Session 18: Smart Grid-Microgrid	5263	Electricity Trading Strategy for Home Users Based on Coalition Cooperation Game

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Date	Time	Session	Paper ID	Paper Title
July. 9	**11:00-11:15**	Technical Session 18: Smart Grid-Microgrid	8170	A global and locally enhanced water cycle algorithm for dynamic economic dispatch of power systems
July. 9	**11:15-11:30**	Technical Session 18: Smart Grid-Microgrid	8310	Fault-tolerant Strategy for MMC with Maximum Line-to-line Voltage Capacity
July. 9	**11:30-11:45**	Technical Session 18: Smart Grid-Microgrid	8752	Robust Optimal Economic Dispatch of Microgrid with Stepwise Demand Response Mechanism

Technical Session 19: Power System Engineering-Power System Operation

Session Chair:

July. 9	**09:00-09:15**	Technical Session 19: Power System Engineering-Power System Operationon	8658	Study of Transformer Loss and Temperature Rise under DC Bias Magnetism Based on Finite Element Method
July. 9	**09:15-09:30**	Technical Session 19: Power System Engineering-Power System Operationon	8872	Research on short-term power load forecasting method based on PCA-VMD-LSTM-MTL
July. 9	**09:30-09:45**	Technical Session 19: Power System Engineering-Power System Operationon	8916	Maximum Power Tracking for Low Frequency Offshore Wind Farm Based on Wind Speed Prediction by Convolutional Neural Network Algorithm
July. 9	**09:45-10:00**	Technical Session 19: Power System Engineering-Power System Operationon	9106	Day-ahead Scheduling Strategy for Bulk Power System Based on Accurate Prediction of Wind Power Output
July. 9	**10:00-10:15**	Technical Session 19: Power System Engineering-Power System Operationon	9163	Data-driven Electricity Market Price Risk Evaluation Based on Price Elasticity Indicator

Technical Session 20: Smart Grid-Low-carbon Power System

Session Chair:

July. 9	**10:45-11:00**	Technical Session 20: Smart Grid-Low-carbon Power System	183	A Carbon Emission Measurement Method and Module System for the Steel Industry

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Date	Time	Session	Paper ID	Paper Title
July. 9	**11:00-11:15**	Technical Session 20: Smart Grid-Low-carbon Power System	3206	Dynamic time-sharing tariff orderly charging strategy for optical storage charging stations in commercial areas
July. 9	**11:15-11:30**	Technical Session 20: Smart Grid-Low-carbon Power System	4259	Research on the Mechanism of Reactive Circulation Generation and its Inhibition in New Energy Stations
July. 9	**11:30-11:45**	Technical Session 20: Smart Grid-Low-carbon Power System	9071	A Multi-market Collaborative Trading Model for Load Aggregator

Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration

Session Chair:

July. 9	**09:00-09:15**	Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration	2739	An Intelligent Adversarial Deep Forecasting Model for Load Demand Using Hybrid Modified DA-GAN
July. 9	**09:15-09:30**	Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration	3236	A Grid-forming Control Method of Modular Multilevel Converter with Integrated Distributed Photovoltaic and Battery Energy Storage System
July. 9	**09:30-09:45**	Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration	3561	Joint Planning of Multi-type Energy Storages and Flexible Resources for High-penetration Renewable Energy Integration
July. 9	**09:45-10:00**	Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration	3632	Model Predictive Control Based Power Scheduling of Offshore Wind Farm for Primary Frequency Support Considering Turbulent Wind Uncertainty
July. 9	**10:00-10:15**	Technical Session 21: Renewable Energy Integration-Renewable Energy Development and Integration	4328	Feature Dimensionality Reduction for Ultra-Short-Term Wind Power Forecasting Based on Global Surrogate Model

Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration

Session Chair:

July. 9	**10:45-11:00**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	5180	Analysis of Transient Response Time for PV Source Simulators and a Design of PV Source Simulator Test Platform

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
July. 9	**11:00-11:15**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	5269	Security-constrained Fast Production Cost Minimization Simulation Based on Time Domain Partitioning Method
July. 9	**11:15-11:30**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	5968	Generic EMT modelling of PMSG wind turbine for digital-analog hybrid bulk grid simulation
July. 9	**11:30-11:45**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	6524	A novel coordination bidding mechanism of virtual power plant based on Stackelberg game
July. 9	**11:45-12:00**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	6444	An Improved Maximum Power Point Tracking Method Under Partial Shading Condition
July. 9	**12:00-12:15**	Technical Session 22: Renewable Energy Integration-Renewable Energy Development and Integration	6647	Hybrid Energy Storage Control Based on Prediction and Deep Reinforcement Learning Compensation for Wind Power Smoothing

Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System

Session Chair: Qian Zhang & Zhaohao Ding

July. 9	**09:00-09:15**	Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System	852	An Optimal Dispatching Method of Power Systems Considering Virtual Inertia Provided by Fuel Cells
July. 9	**09:15-09:30**	Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System	879	Interval Multi-objective Optimization Combined with Deep Reinforcement Learning for Building Energy Management System
July. 9	**09:30-09:45**	Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System	2084	Tram energy consumption prediction based on improved Gaussian process regression model
July. 9	**09:45-10:00**	Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System	2612	Optimal Operation of Seaport Integrated Energy Systems with Coordination between Logistic and Energy Systems
July. 9	**10:00-10:15**	Technical Session 23: Joint Planning and Operation of Energy-transportation Integration System	2678	Research on Distribution Network Joint Planning and Profit Distribution under The Liberalization of Incremental Power Distribution Service

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
Technical Session 24: Joint Planning and Operation of Energy-transportation Integration System				
Session Chair: Qian Zhang & Zhaohao Ding				
July. 9	**10:45-11:00**	Technical Session 24: Joint Planning and Operation of Energy-transportation Integration System	3225	Capacity Compensation Price Evaluation Considering Economic Benefit of Energy Market in a Power Spot Market
July. 9	**11:00-11:15**	Technical Session 24: Joint Planning and Operation of Energy-transportation Integration System	3334	Coordinated Ride-hailing Order Scheduling and Charging for Autonomous Electric Vehicles based on Deep Reinforcement Learning
July. 9	**11:15-11:30**	Technical Session 24: Joint Planning and Operation of Energy-transportation Integration System	4478	Joint Generation and Voyage Scheduling for All-Electric Ships Considering the Impact of Wind and Wave
July. 9	**11:30-11:45**	Technical Session 24: Joint Planning and Operation of Energy-transportation Integration System	7902	A correlation-XGBoost based distributed photovoltaic output prediction method considering regional meteorological factor
Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its application				
Session Chair: Bo Wang & Jie Shi				
July. 9	**13:30-13:45**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	468	Wind power prediction under extreme weather conditions of low temperature based on TimeGAN and GWO-BiLSTM
July. 9	**13:45-14:00**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	5082	An Ultra-short-term Wind Power Forecasting method based on Data-physical Hybrid-driven Model
July. 9	**14:00-14:15**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	6001	A definition and prediction method for wind power low output events
July. 9	**14:15-14:30**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	7682	Wind Power Interval Prediction Based on CGAN and KELM under Extreme Weather Scenarios
July. 9	**14:30-14:45**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	7830	Short-term Wind Power Prediction Based on HDBSCAN with Outlier Factor Method and CNN-BiLSTM

Technical Sessions Agenda Overview

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Date	Time	Session	Paper ID	Paper Title
July. 9	**14:45-15:00**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	8926	Short-term wind power prediction based on variational mode decomposition and hybrid neural networks
July. 9	**15:00-15:15**	Technical Session 25: Renewable Power Forecast Accuracy Improvement Technology and Its applicationn	9247	Generation Method for Medium and Long-term Photovoltaic Power Time Series Considering Variable Order Time Series Characteristics

Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems

Session Chair: Lu Zhang & Bo Zhang

July. 9	**13:30-13:50**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	IS	IS-1
July. 9	**13:50-14:10**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	IS	IS-2
July. 9	**14:10-14:25**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	1208	Interharmonics Suppression Scheme in PV System with Reference Phase Correction MPPT Algorithm
July. 9	**14:25-14:40**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	2271	A method for analyzing boundary conditions of typical power supply structure in AC/DC hybrid distribution network with large-scale photovoltaic access
July. 9	**14:40-14:55**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	1938	Fault Level Prediction Method for Urban Distribution Network Considering Class-Imbalance Problems
July. 9	**14:55-15:10**	Technical Session 26: High-Quality Power Supply Technologies of Low-Carbon Distribution Systemss	4293	Power balancing control method for flexible interconnected three-phase four-wire low-voltage distribution area

Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems

Session Chair: Lu Zhang & Bo Zhang

July. 9	**16:00-16:15**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	6836	Operation Mode and Economic Analysis of Virtual Power Plant

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Date	Time	Session	Paper ID	Paper Title
July. 9	**16:15-16:30**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	5510	Control Strategy and Parameter Design of Flexible Devices in DC-Interconnected Low-Voltage Distribution Networks
July. 9	**16:30-16:45**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	7773	Analysis of multiple source load characteristics and its impact on the distribution network
July. 9	**16:45-17:00**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	5991	Fault Emergency Repair Strategy Considering the Integration of Distribution Networks and Transportation Networks
July. 9	**17:00-17:15**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	7884	A DC Interconnection Transformation Method of Low-voltage Distribution Network Considering Power Outage Risk Assessment in Station area
July. 9	**17:15-17:30**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	7910	Centralization-distributed control strategy for medium and low voltage AC/DC hybrid distribution network
July. 9	**17:30-17:45**	Technical Session 27: High-Quality Power Supply Technologies of Low-Carbon Distribution Systems	8729	Green low-carbon evaluation method based on optimal combination weighting of moment estimation theory

Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources

Session Chair: Fangyuan Si

July. 9	**13:30-13:45**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	154	Research on Battery Energy Storage Health Index Based on Equipment Health Model
July. 9	**13:45-14:00**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	451	Research on Micro-grid Planning Technology under the Background of Carbon Neutrality and New Power System
July. 9	**14:00-14:15**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	1704	Topology and Configuration Optimization of Wind-solar-hydrogen Combined System
July. 9	**14:15-14:30**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	3434	A Multi-Discriminator Weighted Adversarial Network for Cross-Domain Unknown Wind Turbine Fault Diagnosis

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Date	Time	Session	Paper ID	Paper Title
July. 9	**14:30-14:45**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	5069	Low-carbon Economic Optimization for Park Integrated Energy System Considering Multi-network Integration
July. 9	**14:45-15:00**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	5957	Research on Distributed Flexible Resource Planning Method for Integrated Energy System
July. 9	**15:00-15:15**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	6352	An economic scheduling method for coordinated integrated energy systems and transportation networks
July. 9	**15:15-15:30**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	7255	An Improved Sampled–Date-Based Distributed Event-Triggered Secondary Control in Islanded Microgrids
July. 9	**15:30-15:45**	Technical Session 28: Optimal Planning and Operation of Regional Integrated Energy Systems Under the Scalable Aggregation of Flexibility Resources	9294	An Improved SD-Jaya Algorithm for Multi-Objective Edge Computing Problem in IRS-Aided Charging Electric Vehicular Networks

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Date	Time	Session	Paper ID	Paper Title
Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration				
Session Chair:				
July. 9	**13:30-13:45**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	7075	Joint Energy and Frequency Regulation Market Clearing Considering Wind Power Uncertainty
July. 9	**13:45-14:00**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	7860	Continuous Fault Ride-Through Control of Wind Turbine using Energy Storage based DVR
July. 9	**14:00-14:15**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	8079	Systematic Controller Design for DFIG-Based Wind Turbines to Enhance Synchronous Stability During Weak Grid Fault
July. 9	**14:15-14:30**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	8623	Comparison of Structure and Control Strategy for Offshore Wind Power Integration Using HVDC
July. 9	**14:30-14:45**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	9224	Research on Transient Reactive Power Support Enhancement Technology for Doubly Fed Wind Turbine Generator
July. 9	**14:45-15:00**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	9355	Cross-Entropy-Based Approach to Multi-Objective Electric Vehicle Charging Infrastructure Planning
July. 9	**15:00-15:15**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	9379	Experimental Study on the Damage Mechanism of High-Frequency Partial Discharge of Multilayer PI Films Under Repetitive Electrical Stress
July. 9	**15:15-15:30**	Technical Session 29: Renewable Energy Integration-Renewable Energy Development and Integration	9550	Anomalous Update Identification Based on Cosine Similarity for Collaborative Wind Power Forecasting
Technical Session 30: Power System Engineering-Power System Protection				
Session Chair:				
July. 9	**13:30-13:45**	Technical Session 30: Power System Engineering-Power System Protection	295	A Thevenin Model for Internal Electromagnetic Transient Characteristics Study of the MMCs

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Date	Time	Session	Paper ID	Paper Title
July. 9	**13:45-14:00**	Technical Session 30: Power System Engineering-Power System Protection	777	A Novel Controllable Oscillating Homopolar Coupling DC Circuit Breaker for VSC-based DC grids
July. 9	**14:00-14:15**	Technical Session 30: Power System Engineering-Power System Protection	3575	Commutation fault identification of UHVDC transmission system based on dissipated energy
July. 9	**14:15-14:30**	Technical Session 30: Power System Engineering-Power System Protection	4157	Phase Current based Fault Section Location for Single-Phase Grounding Fault in Non-Effectively Grounded Distribution Network
July. 9	**14:30-14:45**	Technical Session 30: Power System Engineering-Power System Protection	5030	Analysis of Short Circuit Protection Failure and Component Defects of Low Voltage Switchgear
July. 9	**14:45-15:00**	Technical Session 30: Power System Engineering-Power System Protection	5172	Multi-objective fault recovery strategy for distribution networks with distributed generation
July. 9	**15:00-15:15**	Technical Session 30: Power System Engineering-Power System Protection	5594	Terahertz Nondestructive Testing For Debonding Defects of Insulating paperboard
July. 9	**15:15-15:30**	Technical Session 30: Power System Engineering-Power System Protection	6605	Line Selection Strategy for Single-phase Grounding Fault in Distribution Network Considering Bidirectional Power Flow

Technical Session 31: Power System Engineering-Power System Protection

Session Chair:

July. 9	**16:00-16:15**	Technical Session 31: Power System Engineering-Power System Protection	7448	Directional Relay of Wind Farm Transmission Line Based on Traveling Wave Polarity Comparison
July. 9	**16:15-16:30**	Technical Session 31: Power System Engineering-Power System Protection	7530	Characteristic analysis and category recognition of insulating paperboard surface pattern based on image morphology calculation
July. 9	**16:30-16:45**	Technical Session 31: Power System Engineering-Power System Protection	7569	An Enhanced Instantaneous Calculation Method of CommunicationVoltage Magnitude for Predicting CF in HVDC System
July. 9	**16:45-17:00**	Technical Session 31: Power System Engineering-Power System Protection	8275	A Forced Oscillation Source Location Method in Power Systems Using Variational Mode Decomposition and Dissipation Energy Flow

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Date	Time	Session	Paper ID	Paper Title
July. 9	**17:00-17:15**	Technical Session 31: Power System Engineering-Power System Protection	9394	Fault location method of hybrid three-terminal DC transmission line based on null space pursuit

Technical Session 32: Energy Systems-Distributed Energy Resources

Session Chair:

July. 9	**13:30-13:45**	Technical Session 32: Energy Systems-Distributed Energy Resources	2406	Comprehensive Evaluation of Industrial Integrated Energy System Based on Grey Correlation Analysis and Entropy Weight Method
July. 9	**13:45-14:00**	Technical Session 32: Energy Systems-Distributed Energy Resources	4236	Coordinated Control and Operation Stability Analysis of Multi-port DC substation applied in Power Distribution System
July. 9	**14:00-14:15**	Technical Session 32: Energy Systems-Distributed Energy Resources	4459	Generalized Load Modeling of Compressed Air Energy Storage
July. 9	**14:15-14:30**	Technical Session 32: Energy Systems-Distributed Energy Resources	6017	A Novel Non-Isolated Bidirectional 48V-12V DCX Converter With Transformer-Coupled Gate Driver
July. 9	**14:30-14:45**	Technical Session 32: Energy Systems-Distributed Energy Resources	6473	Architecture Design of Reconfigurable Sensing Terminal Platform Considering Distributed Energy
July. 9	**14:45-15:00**	Technical Session 32: Energy Systems-Distributed Energy Resources	6588	Research on source-load cooperative scheduling strategy based on probabilistic distance fast reduction method
July. 9	**15:00-15:15**	Technical Session 32: Energy Systems-Distributed Energy Resources	6702	Research on Control Strategy of an Isolated Two-stage Battery Storage Converter

Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid

Session Chair:

July. 9	**13:30-13:45**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	3619	Spatiotemporal Precise Routing Strategy for Multi-UAV-based Power Line Inspection Using Hybrid Network of FANET and Satellite Internet

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Date	Time	Session	Paper ID	Paper Title
July. 9	**13:45-14:00**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	4194	Two-stage optimal operation strategy of distribution network considering orderly charging and discharging of electric vehicles
July. 9	**14:00-14:15**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	5307	Collaborative optimization of transmission and distribution networks based on feasible domain projections
July. 9	**14:15-14:30**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	5886	Forms of the Energy Internet under Digital Transformation
July. 9	**14:30-14:45**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	7023	Resource Demand Analysis of IoT Terminal Chips Based on Atomic Service Modeling
July. 9	**14:45-15:00**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	7304	An online fault feeder detection method based on incremental and federated learning
July. 9	**15:00-15:15**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	8423	Sattellite Internet-based High-Precision Space-Ground Coordinated Ultra-short-term Photovoltaic Power Prediction
July. 9	**15:15-15:30**	Technical Session 33: Smart Grid-Novel Information Technologies for Smart Grid	7864	Reasonable value calculation of synchronous line loss in power distribution station area

Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"

Session Chair: Ming Yang & Zhaohao Ding

July. 9	**16:00-16:15**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	1117	Strategic Bidding of Load Aggregator in Demand Response Market considering Shared Energy Storage
July. 9	**16:15-16:30**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	1359	The distributed coordinated operation strategies of distribution network and multi-micro energy grids
July. 9	**16:30-16:45**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	2179	Classification method of customer based on load curve image information

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Date	Time	Session	Paper ID	Paper Title
July. 9	**16:45-17:00**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	2712	Non-Cooperative Game Theory-based Optimization strategy of P2P Power Usage Quotas Transaction in Communities
July. 9	**17:00-17:15**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	2771	Interaction Characteristics Modeling of Microgrid Clusters Based on Federated Learning
July. 9	**17:15-17:30**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	9102	Improved Temporal Convolutional Network Based Ultra -Short-Term Photovoltaic Power Prediction
July. 9	**17:30-17:45**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	9637	A Spatiotemporal Interpolation Approach for Distributed PV Power Based on WPT and DTW
July. 9	**17:45-18:00**	Technical Session 34: National K&D Program "Research on Key Technologies and Simulation Platform of Collaborative Operation of Active Distribution Power System based on Multiple Flexibility Mining"	721	Cost Efficient Job Scheduling Scheme for Large Scale Data Center

Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems

Session Chair: Tianguang Lu & Changsen Feng & Kaiqi Sun

July. 9	**16:00-16:15**	Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems	4888	Distributed optimization operation of multi-microgrid with electricity-carbon trading
July. 9	**16:15-16:30**	Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems	5198	Coordinated Optimization Scheduling of Geo-distributed Multiple Data Centers and Electricity Retailers Based on Cooperative Game Theory
July. 9	**16:30-16:45**	Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems	5707	The Coordinated Charging Pricing Approach for Charging Stations with Multi-agent Deep Reinforcement Learning
July. 9	**16:45-17:00**	Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems	6251	Source-Load Synergistic Optimization for Power System Considering Low-Carbon Demand Response
July. 9	**17:00-17:15**	Technical Session 35: Smart and Interactive Energy Management for Multi-agent New Types of Power Systems	9066	Multi-stage Pricing Strategy of Charging Station based on EV Charging Load Forecasting

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Date	Time	Session	Paper ID	Paper Title
Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage				
Session Chair:				
July. 9	**16:00-16:15**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	740	A Capacity Degradation Estimation Error Correction Method for Lithium-ion Battery Considering the Effect of Sequential Depth of Discharge
July. 9	**16:15-16:30**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	1755	Optimal Anomaly Threshold Selection for Monitoring Grid-Connected Lithium-ion Battery Storage Systems
July. 9	**16:30-16:45**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	4809	State-of-Charge Estimation of Lithium-Ion Batteries based on Data-Model Fusion Method
July. 9	**16:45-17:00**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	5435	Capacity Estimation of Lithium-Ion Batteries using Electrochemical Impedance Spectroscopy and Optimized Extreme Learning Machine
July. 9	**17:00-17:15**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	7345	Faulty Diagnoses of PMSM in Flywheel Energy Storage Based on Phase Current Signal and Convolutional Neural Network
July. 9	**17:15-17:30**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	8185	Research on SoC Architecture Model And Its Application In BMS Scenario
July. 9	**17:30-17:45**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	8303	Real-time Condition Monitoring and Diagnostic Solution for Utility-scale Inverters and Distribution Transformers
July. 9	**17:45-18:00**	Technical Session 36: Energy Storage Technologies-Real-time Monitoring of Energy Storage	9148	Online SoC Estimation for Lithium-ion Batteries Based on the OCV Online Calculation and Coulomb Counting Method
Technical Session 37: Energy Systems-Energy Efficiency & Energy Systems-Low-carbon Energy System				
Session Chair:				
July. 9	**16:00-16:15**	Technical Session 37: Energy Systems-Energy Efficiency	280	Characteristic Parameters Analysis of Bond-wire Failure for Multi-chips Parallel IGBT Modules

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Date	Time	Session	Paper ID	Paper Title
July. 9	**16:15-16:30**	Technical Session 37: Energy Systems-Energy Efficiency	768	Research on Quantitative Model of Metro Traction Energy Consumption Considering Temporal and Spatial Characteristics of Passenger Flow
July. 9	**16:30-16:45**	Technical Session 37: Energy Systems-Energy Efficiency	3921	Model Predictive Control of Distributed Adjustable Jet Pump in District Heating System Considering Renewable Energy Access
July. 9	**16:45-17:00**	Technical Session 37: Energy Systems-Low-carbon Energy System	4872	Multi-Stage Planning of Park-Level Integrated Energy System Considering Ladder-Type Carbon Emission Trading and Green Certificate Trading
July. 9	**17:00-17:15**	Technical Session 37: Energy Systems-Low-carbon Energy System	5705	Active Vibration Suppression of Floating Wind Turbine based on Fuzzy PID Controller
July. 9	**17:15-17:30**	Technical Session 37: Energy Systems-Low-carbon Energy System	7747	Optimal Operation of Integrated Electricity-Gas Systems Considering Hydrogen Injection
July. 9	**17:30-17:45**	Technical Session 37: Energy Systems-Low-carbon Energy System	9327	Multimode Bipolar Hybrid Asymmetrical Dual Active Bridge Converter for Bipolar DC System
July. 9	**17:45-18:00**	Technical Session 37: Energy Systems-Low-carbon Energy System	9299	Study of Intelligent Control System of Fan Coil

Technical Session 38: Renewable Energy Integration-Evaluation of Renewable Energy & Renewable Energy Integration-High Penetration of Renewable Energy

Session Chair:

July. 9	**16:00-16:15**	Technical Session 38: Renewable Energy Integration-Evaluation of Renewable Energy	4739	A Copula-Based Evaluation Method for the Available Inertia of Wind Farm
July. 9	**16:15-16:30**	Technical Session 38: Renewable Energy Integration-Evaluation of Renewable Energy	5477	Adequacy Assessment of Power System Peak Regulation with Spatio-temporal Correlation of Wind and Photovoltaic Power
July. 9	**16:30-16:45**	Technical Session 38: Renewable Energy Integration-Evaluation of Renewable Energy	6173	Evaluating of Distributed Photovoltaic Hosting Capability in Distribution Stations Considering Chance Constrained
July. 9	**16:45-17:00**	Technical Session 38: Renewable Energy Integration-Evaluation of Renewable Energy	7888	Research on load capacity improvement of electric vehicles based on orderly charging

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Date	Time	Session	Paper ID	Paper Title
July. 9	**17:00-17:15**	Technical Session 38: Renewable Energy Integration-High Penetration of Renewable Energy	1289	Transient Fault Current Calculation Method of Photovoltaic Grid-Connected System Considering the Dynamic Response of Phase-Locked Loop
July. 9	**17:15-17:30**	Technical Session 38: Renewable Energy Integration-High Penetration of Renewable Energy	2285	CVaR-Constrained Robust Unit Commitment for Power System with Concentrating Solar Power
July. 9	**17:30-17:45**	Technical Session 38: Renewable Energy Integration-High Penetration of Renewable Energy	3492	Multi-Scale Optimal Dispatch of Power System with Pumped Storage Units Considering New Energy Uncertainty
July. 9	**17:45-18:00**	Technical Session 38: Renewable Energy Integration-High Penetration of Renewable Energy	4620	Methods and Application of New Energy Power Plant Equivalent Modelling for Massive New Energy Electro-magnetic Simulation
July. 9	**18:00-18:15**	Technical Session 38: Renewable Energy Integration-High Penetration of Renewable Energy	7585	Study of Frequency Response Control Strategy for Wind-Storage System Considering Lithium Battery Life Loss