2025 7th Asia Energy and Electrical Engineering Symposium (AEEES 2025)

Chengdu, China 28-31 March 2025

Pages 1-779



IEEE Catalog Number: CF. ISBN: 979

CFP25UWL-POD 979-8-3315-1755-7

Copyright © 2025 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:CFP25UWL-PODISBN (Print-On-Demand):979-8-3315-1755-7ISBN (Online):979-8-3315-1754-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400 Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



The 7th Asia Energy and Electrical Engineering Symposium

(AEEES 2025)

March 28-31, 2025

Chengdu, Sichuan, China



The 7th Asia Energy and Electrical Engineering Symposium

(AEEES 2025)

Table of Contents

Pr	efacexx
Co	onference Committee xxi
>	Design and Performance Simulation of New Power Electronic Devices
Su	rface Wettability and Flashover Characteristics of Insulating Materials Under Different Electric Fields
	Wenhua Huang, Shengwen Shu, Zhiwen Bian, Yihong Lin, Dengfeng Wei, Yanxue Guo
	Uniform Field Construction Method with a Dominant Parallel Component for Evaluating the Performance of Sulating Pressboard
	Huanchao Cheng, Xinru Yu, Xiaokang Wu, Chao Wu, Xiaoyu Zhao, Bo Tao
De	sign and Experimental Research on MMC Valves with Energy Dissipation Capability10
	YongJie Hu, Kun Han, ShuYa Li, LuLu Liu, KePeng Xia, Kun Liu, ShuaiQing Wang
Re	view of Research on Core Reactor Vibration
	Liu Jiqiu, Wang Rui, Qiu Ning, Liu Yu, Tian Cuihua, Wu Lingchun
De	sign of Reliability Assessment Scheme for Secondary Equipment in Substations
	Yao Zhiqiang, Fan Chen, Ren hui, Yu Tongwei, Zhang Haidong, Xu Xin
Pra	actical Analysis of Fast Measurement of Electrochemical Impedance Spectra Based on Wavelet Transforms27
	Hao Ye, Sheng Jiang, Dawei Chen, Chuyang Wu, Yupei Zhang
An	alysis of Reconnection Electromagnetic Launcher to Drive Maglev Train
	Hengyou Li, Liang Dong, Xiaokun Xie, Zhixun Fan, Wenlong Jiang
Re	search on Power Equipment State Evaluation Method Based on Game Combination Weighting39
	Shujian Huang, Shihao Yang, Jingtang Liang, Huanshen Zhang, Jianrong Liu, Boming Zhuang, Xuan Zhang Lvxing Guo
Op	timization of Main Pump Speed Acquisition in Nuclear Power Plants Based on Magnetoresistive Sensors45
	Zhichuan Zeng, Shun Wang, Bin Liu, Jing Zhou, Jie Chen, Yu Yang
Sw	ritchgear Circuit Breaker Contact Temperature Prediction Method Based on LSTM-PLS
	Jinsheng Pan, Shengwen Shu, Zhiwen Bian, Yihong Lin, Dengfeng Wei, Yanxue Guo
Op	timization Analysis of Control Strategy for Electrically Driven Circuit Breakers
	Rui Yang, Da Li, Hua Wei, Yan Ma, Jinqing Ding, Pingkai Niu, Chang Dai, Yazhou Ding

Modeling and Simulation of Electric Thermal Coupling Model for Ship Electric Propulsion Equipment	62
Shiyu Liu, Le Liu, Wenfeng Long, Pengfei Xie	
Modeling and Error Characteristic Analysis of Current Transformer Considering Low-frequency Condition	68
Qiyu Jiao, Zhe Yang, Zhenfei Chen, Le Han, Changqing Ma, Zihao Xu	
A New Method for Improving the Efficiency of Magnetic Field Energy Harvester by Filling the Air Gap with Conductive Materials	_
Chaofan Lv, Yankai Xing, Yalong Mai, Daotian Pang, Jian Li, Qi Huang	
Research on Parallel Application Technology of High-Power Thyristors Under Surge Conditions	79
Xinle Sha, Shiyu Liu, Pengfei Xie, Zhigang Ren	
> Inverter System and Voltage Control	
Analysis of the Constant Amplitude Oscillation Mechanism in the Grid-Connected Inverter System by C Impedance Analysis and the Describing Function Method	
Dawei Chen, Liang Chen, Yuhong Mi, Weiman Yang	
Nonlinear Study of Grid-connected Multilevel Cascaded H-bridge Inverter	91
Yupei Zhang, Hao Ye, Dawei Chen, Sheng Jiang	
The Influence of Nonlinear Factors on System Stability in Cascaded H-bridge Grid-connected Inverters	97
Sheng Jiang, Zhilong Tang, Hao Ye, Dawei Chen, Chuyang Wu, Yupei Zhang	
Research on Photovoltaic Inverter Network Security Enhancement Method Based on System Identification	
Vivosi Vona Char Hone Thilene Lines Line Char Land Di Thiing Thi Vona Thans	102
Yiwei Yang, Chao Hong, Zhihong Liang, Lin Chen, Leyu Bi, Zhijun Zhi, Yunan Zhang	110
Improved multi-carrier modulation strategy suitable for cascade H-bridge photovoltaic inverters	110
Zhangheng Peng, Lin Chai, Bowen Liu M. J. L. S. V. L. Francisco Control of C	116
Model of Node Frequency Dynamics for Grid-Following Inverters Considering Current Dynamics	113
	120
The Research on Pre-Synchronization Control for Virtual Synchronous Generator Inverter	
A Load-Adaptive Modulation for Soft-switching Grid Connected Inverters	
Xiaoming Wang, Zhiyuan Sun, Yiyun Yang, Jinzhao Li, Yi Song	123
Capacitor Voltage Balancing Control Strategy for Flying Capacitor Multilevel Inverter	130
Yiyun Yang, Zhiyuan Sun, Xiaoming Wang, Jinzhao Li, Xuanren Meng	132
Model Predictive Torque Control with Flying Capacitor Voltage Balancing of 4L-NNPC Inverter based PM	ISM Drive
winder Frederick Torque Control with Frying Capacitor Voltage Balaneing of 42 TVITC inverter based Five	
Muhammad Zahid Rafique, Rao Atif, Shunfeng Yang, Muhammad Usman, Mohsin Ihsan, Muhammad U	Isman
> Transformer Model and Electrical Characteristics Evaluation	
Transformer Fault Diagnosis Method Based on DC-SMOTE-SSA-SVM	145
Xin He, Shengwen Shu, Guobin Wang, Kang Wang, Jinglan Zeng, Guangyu Shi	
Fault Diagnosis Method of Power Transformer Winding Looseness Based on CEEMDAN-BWO-SVM	151
Xudong Deng, Kaixin Chen, Yixiao Ruan, Feixue Xiang, Tiangi Wang, Zijian Dong, Jiagi Cheng	

Mitigation Strategies for Low-Voltage and Transformer Overload Issues in Mountainous Area Distribution Network
7 Jhong Song Molin Ho Vongrigng Cai, Yang Wang, Voughuo Thong Mingjun Ho Vinny Vou
Zihong Song, Molin He, Yongxiang Cai, Yang Wang, Youzhuo Zheng, Mingjun He, Xinyu You
Voltage Deviation Suppression Strategy for Hybrid AC/DC Distribution Networks with Multiple Power Electronic Transformers
Yulan Zhu, Kai Liao, Xiao-Ping Zhang, Jianwei Yang, Zhengyou He
Research on Vibration and Propagation Characteristics of Transformer Winding Based on Multi-physical Field Coupling169
Xudong Deng, Yuehua Li, Kaixin Chen, Xin Li, Chuan Liu, Zijian Dong, Fan Wang
Research on Load Forecasting Method Based on SHAP Value Analysis and Improved Transformer Model175
Jianghao Hu, Zicheng Wang, Guangdi Li, Qianqian Wu
Modification of Silicone Rubber Insulation Materials for Dry-Type Transformers
Woyang Li, Lijun Zhou, Yunyun Qian, Qian Lei, Yingyi Xia, Dongyang Wang
Relay Protection Configuration for the Thyristor Controlled Phase Shifting Transformer
Peng Li, Shi Chen, Jinjiao Lin, Liangliang Song
Visual Evaluation of Digital Transformer DP Based on Virtual and Real Sensing
Wang Xuelei, Zhu Mengzhao, Wang Jian, Gu Zhaoliang, Zhu Qingdong, Yi Feng
Research on the Electric Field-Temperature Coupling Characteristics of Insulating Oil-Paper Materials for Converter Transformers
Chao Gu, Mengzhao Zhu, Jian Wang, Xuelei Wang, Zhaoliang Gu, Longlong Li
Converter Structure Design and Operation Control
Transient Voltage Analysis for Hybrid Grid-Following and Grid-Forming Converters
Xindi Liu, Shanshan Qiu, Changhui Ma, Xing Lei, Xinyu Wei, Changgang Li
A New Method for Electromagnetic Transient Simulation of DC Capacitor in Full-Power Converter
Analysis and Suppression Method of High-Frequency Oscillation in Parallel DC-DC Converter System216 Tianyu Fang, Xinchun Lin, Juntian Wei, Jiayan Zhang, Chenyang Xie, Jing Zhou, Xiao Huo, Zijie Kang
Research on MPPT control of a direct-drive wave energy converter based on adaptive perturbation observation method
Ruixian Wang, Hailian Jing, Linlin Li, Hongyu Zhu,
Control Strategy of Modular Multilevel Matrix Converter under Two-phase Operation
Shixuan Liu, Jiandong Duan, Wanying Yan, Yuze Feng
An Asymmetric Control Strategy of Overmodulated Hybrid Modular Multilevel Converters for Capacitor Voltage Balancing Effect Enhancement
Hong Wu, Yue Wang, Yi Liu, Tianyi Zhang, Runtian Li, Yonghui Liu
> Transmission Line Detection and Risk Identification
Application Scenario Analysis and Evaluation Model for Superconducting Cable Planning in Urban Power Grid239
Bingyan Sui, Chenfang Gu, Ting Jiao, Honglei Li

Experimental Study on the Influence of Extreme Liquid Medium on the Mechanical Properties of Polymer Insulation o High Voltage Cable Joints
Yi Lu, Yuanxiang Zhou, Xiaolong Huang, Bin Su, Shuochao Fan, Yamei Li, Xu Zhang, Yanfeng Gao
A Review on the Factors Influencing the Heat Dissipation of Tunnel Cables
Sijie Cheng, Dongsheng Cai, Qi Huang
Investigation on Improving the Ampacity of Power Cables within Tunnel Through the Application of Heat Pipes 256 Yuyong Cui, Ziheng Gao, Guiqiang Lv, Pengyu Wang
Optimized Thermal Rating Method for Pipe-laying Cable with Incomplete Backfill of High Thermal Conductivity Material
Guiqiang Lv, Shangyu Yu, Yuyong Cui, Jinyue Zhang, Yanli Xin, Pengyu Wang
A Method for Analysis of DC Partial Discharge Measurement Data from Cable Joints
AC and DC Withstand Voltage Tests in Commissioning Test Procedure Designed for ±535kV HVDC Cable27
Yi Lu, Yuanxiang Zhou, Xiaolong Huang, Dangguo Xu, Wenpeng Li, Peng Zhao, Yamei Li, Yanfeng Gao
Research And Application Of Multi-point Feeder Automation For Overhead Lines In Intelligent Distribution275 GenQi Chen, ShaoChun Wang, ZhenHua Huang, Wei Gu, YinMing Zhao
> Situation Awareness, Coordinated Operation, and Planning of New Power System
Research on Digital-Analog Hybrid Simulation Test Technology for VSC-HVDC Based on ADPSS282
Xiangxu Wang, Feng Wang, Guying Zhuo, Jianchao Wu, Degui Yao, Qing Mu, Hongying Peng, Chenghao Li
Peak Shaving Capability Assessment Approach of Multi flexible Resources Based on the Time-series Production Simulation of Combined Heat and Power Systems
Yi Ding, Ying Xu, Zhongkai Yi, Zhenwei Li, Shuang Rong, Xuecheng Zhu
Modeling Method of Protection Operational Risk in Smart Substation Based on Distributed Petri Nets293
Xinwen Cui, Yingqi Wang, Xiaoyang Tong, Li Chen, Xiaoyong Sun, Hongbin Wang
Analysis and Optimisation of Grounding Resistance of Substation Based on Gobi Desert Landform
A Novel Data-Knowledge Co-driven Method for Forced Oscillation Sources Localization
Zhenjie Cui, Weihao Hu, Guozhou Zhang, Shi Jing, Zhenyuan Zhang
The Optimization Strategy for Battery Swapping Stations Charging Scheduling Considering Time-of-Use Electricity Pricing
Hengjie Li, Jiajun Xu, Yun Zhou, Donghan Feng, Chen Fang, Haojing Wang
> Novel Motor System Model and Coordinated Control
Model Predictive Control of Virtual Synchronous Machine Based on WOA
Chuyang Wu, Sheng Jiang, Hao Ye, Yupei Zhang, Dawei Chen
EPLL-based Speed Estimation: An Option for High-Performance Sensorless Induction Motor Drives

Sensitivity Analysis of a Magnetic Conductivity Bias Segmented Rotor Switched Reluctance Motor
Electromagnetic Performance of Arc-Linear Permanent Magnet Synchronous Motors With Different Slot/Pole Number Combinations
Yuyang Zhang, Wu Ren, Bin Ji, Zhenghu Zhong, Yongqin Hao, Jianping Zhao
Multiple Stages Coordinated Control of Wind Turbine Generators and Energy Storage Systems for Frequency Supportional Considering Multiple Constraints
Kangyi Sun, Dahu Li, Wei Yao, Hongyu Zhou
Coordinated control of static reactive power generator and fixed capacitor bank under reactive power prediction34
Shenhui Gu, Fan Zhang, Chunyan Pu, Xiaowei Zhao, Chaohong Zhou, Feng Xu
Research and progress on method of air gap monitoring of stator and rotor of hydro-generator units
Sijia Fan, Xiaoting Sun, Jiayi Zhao, Shuang Liu, Jiage Shan, Shouman Chen, Cheng Li, Dali Ding
Brushless Excitation Technolgies for Doubly Fed Induction Generator System: Survey of Solutions and Future Trend
Zaki ud din, Jian Wang, Jianzhong Zhang, Xingyuan Song
Research on Optimized Active Power Allocation Strategy for Wind Farms Considering Fatigue Damage of Win Turbines
Jiaxing Ren, Yanbing Jia, Changlin Li, Guoqiang Zhang
Real-Time Parameter Identification for Model Predictive Control of PMSM Using Incremental LSTM37
Dongdong Zhang, Min Sun, Xiaogang Lin, Hongtao Huang, Quan Zhang
Research on PMSM Speed Loop Sliding Mode Control Strategy for Dealing with External Constant Interference37 <i>Huang Guokai</i>
An Improved Zero-Sequence Current Suppression Method for Open-Winding PMSM Based on Cost Free Functio Model Predictive Torque Control
Dongdong Zhang, Wei Wang, Xiaogang Lin
> DC Transmission System Control and Fault Protection
Transmission Network Expansion Planning with Consideration for Optimal Integration of Renewable Energy 38 Jialiang Wang, Mingqiang Wang, Yizhe Zhang, Zihan Wang, Chang Xu
Offshore-Onshore Grid Synergistic Planning for Offshore Wind Power Bases Considering HVAC, LFAC and HVDe Transmission
Peng Zhang, Boyang Zhao, Runcheng Gan, Jing Li, Xiuli Wang, Enchao Xu
Two-Stage Robust Optimization for Transmission Network Expansion Planning Considering N-k Security Criterio
Yuhan Yin, Jianyong Zheng, Kunxiao Wu, Fei Mei, Shuai Wang, Yuting Ding
Source-grid Collaborative Expansion Planning for Transmission Network Based on an Acceleration Technique 40
Yuhan Yin, Jianyong Zheng, Kunxiao Wu, Fei Mei, Ruilin Xu, Yue Wu
Simulation study of the attenuation of corona current pulses on 1000kV UHVAC overhead transmission lines41 <i>Huichu Xie, Wei Deng, Weidong Liu, Yao Lu</i>

Research on Real-Time Simulation Testing Methods for Control and Protection Systems Based on Flexibl Low-Frequency Power Transmission
Tianyu Guo, Hongyuan Wu, Xingyu Pei, Haiping Guo
Generalized and Robust LSTM Model for Fault Detection and Classification in Power Transmission Line42
Syed Murtoza Mushrul Pasha, Chunxiao Ye, Md. Shakhauat Hossain Sumon, Md. Shahadat Jaman, Shahidu Rahoman Sohag, Muhammad Mahin Ali, Md Abdul Ahad Juel
Research on Non-Contact Conductor Galloping Detection in High-Voltage Overhead Transmission Lines by Magneti Sensor Array
Yalong Mai, Yankai Xing, Daotian Pang, Bangjie Xia, Jian Li, Qi Huang
A Novel Pilot Protection Based on Transient Current Time-Frequency Matrix Distance for Power-Frequenc Transmission Lines Connected to M3C
Yuze Feng, Jiandong Duan, Wanying Yan, Shixuan Liu
A Resilience-Oriented Method for Identifying Critical Lines in Active Distribution System
Coordinated Control of Multiple Dynamic VAR Sources in LCC-HVDC Systems to Mitigate Commutation Failure an Enhance Voltage Stability
Liqing Zhang, Tianjun Jing, Zhuohui Zhang, Shengduo Shi, Xin He
Simulation Analysis of Switching Overvoltage in 220kV/300MW Flexible Low Frequency Transmission System45
Wanjie Li, Nan Wang, Denghui Zhai, Weihua Xie, Kun Zhang, Wenlong Ren
> Smart Grid Control Model and System Evaluation
Research on Operation and Control of Power Grid UAVs Based on Digital Airspace
A Robust Optimization-Based Planning and Allocation Method for Smart Grid Technological Transformatio Investment Considering Operational Uncertainties and Hierarchical Evaluation
Ying Zhou, Yaling Jian, Zhuhan Long, Qian Wang, Lin Hu
Construction of the Implementation Sequence Model of the Power Grid Production Project Based on the Quantitativ Audit Rules
Ruigang Tong, Quanfeng Lv, Zebang Yu, Jingya Chen, Na Wang, Tong Li
Stabilization Control Strategy of Flexible HVDC Converter for Suppressing Low-Frequency Oscillations in Power Grid
Wanjie Li, Denghui Zhai, Lei Gao, Zhenghu Hao, Weihua Xie, Jing Lyu
Research on the Dynamic Balance Strategy for Power Grid Infrastructure Investment Considering Multiple Disturbance
Wen Xia Liu, Fu Xin Wang, Yun Xu, Hai Yang Wan, Tong Li, Wei Cheng, Xiao Hui Wang, Yu Jie Wang, Hong We Wang, Chang Cheng Song
Grid Impedance Estimation for Hybrid GFL and GFM Systems
Chen Peng, Jingrong Yu, Wenxuan Yao, Jiaqi Yu, Hankang Tian
Study on Demand Response Control Strategies of Residential Temperature-Controlled Loads Based on Multi-Timescal Dynamic Priority
Jun Tan, Chuan He, Jingyu Liu, Yanghui Ding

	earch on Electrolytic Aluminum Load Participation in Power Grid Secondary Frequency Regulation Based on imized Dynamic Matrix Control
Орі	Chong Han, Siyang Liao, Xuehao He, Lingfang Li, Jiaquan Yang
Cer	nent Enterprise Adjustable Capacity Evaluation Method Based on State-Task Network
CCI	Yuduo Xiao, Haonan Lu, Siyang Liao, Lingfang Li, Jiaquan Yang, Xuehao He
BES	SS-Based Grid-Forming Voltage Support Control with Grid Impedance Estimation in Weak Grids511 Shaojie Zhu, Yibin Tao, Haoyuan Li
>	Intelligent Control and Management of Modern Power and Energy Systems
Para	ameter Identification Method of HVCB Trip Device Based on Feature Matching
	Feiyue Yan, Guangmin Song, Meirong Li, Yufei Liu, Borui Niu, Jiangjun Ruan
Res	earch on Integrated Technology of Energy Recovery of Piezoelectric Flow Induced Vibration in Hydro Power Station
	Shouman Chen, Dali Ding, Jiage Shan, Sijia Fan, Jiayi Zhao, Shuang Liu
Dis	tributed Control Strategy for Hybrid Energy Storage on Grid-Forming Converters
	Yaodong Zhang, Guangdi Li, Zicheng Wang, Zhaoxia Xiao, Xuan Wang
Enh	nancing Efficiency in Wireless Power Transfer through Metasurface Integration
Cor	ntrol Study of Direct-Drive Permanent Magnet Synchronous Wind Power Generation System
Res	earch on Map-model Fusion Technology for Intelligent Substations
	Wang Huapeng, Zhang Jinhu, Zhao Na, Li Wenzhuo, Jiang Jianing, Li Ang
Eva	luation of Wind Farm Power Generation Capacity Using Comprehensive Operational Simulation548
	Xiaolei Wang, Yu Kong
Res	earch on the Suppression of Crossing Power in Continuous Traction Power Supply System of Electrified Railway
	Miaomiao Zhi, Xiaohong Huang, Le Luo, Gongyu Jia, Tao Liu, Ken Qin
>	Distribution Network Capacity Planning and Optimal Configuration
	Nethod for Location and Capacity Determination of Energy Storage in Distribution Networks Based on an Improved hed Particle Swarm Optimization Algorithm561
	Denghai Wang, Fan Zhang, Shenhui Gu, Li Fan, Zhifeng Li, Yan Zhang
	aptive Strategies for Distribution Networks: Time-of-Use Pricing and Charging Station Layout under the Integration Large-Scale Electric Vehicles
	Lei Qiu, Chen Kai Song, Xiang Long Lian
	dy on Rolling Optimal Scheduling Method for Optimal Tidal Current in Distribution Network Considering Electric nicle V2G Mode573
	Yi Long, Sen Li, Bin Zhu, Xiaorui Hu, Xin Chen
OL	TC-Driven Network Reconfiguration for Enhanced Renewable Hosting Capacity
	Wenyang Deng, Dongliang Xiao, Mingli Chen, Sizhe Chen, Dongrui Zhu

Energy router-based optimal scheduling method for multi-terminal interconnected AC-DC hybrid distribution networ	
Xian Zheng, Jian Liu, Wenqiang Xie, Jianyu Yu, Xuefeng Ge	רטי
Urban Distribution Network Planning Considering Three-sectioned and Two-linked Network	591
Yizhe Zhang, Mingqiang Wang, Jialiang Wang, Chang Xu, Zihan Wang	
Research on the Noise Reduction Technology of Traveling Wave Waveform of Power Distribution Network5	598
Gengpei Jia, Zongwei Liu, Xiaoqing Han, Yufan Gao, Yihui Wang, Kaiming Chen	
Research on Distribution Network Resilience Assessment and Optimization Method Based on Flexible Resource	
Chen Xu, Junyong Liu, Bo Zhang, Leimin Shi, Shenghua Wang, Dawei Liu	
A Reliability Evaluation Method of Distribution Grids Considering Distributed Flexible Resources	512
Taoxing Liu, Changzheng Shao, Qinglong Liao, Xintong Li, Xuan Li	
Integrated Scheduling of Active Distribution Network Considering Capacity Reserves and Ramping Reserves 6 Shengqi Zhou, Shimin Zhong, Chang Xu, Xiaojian Miao, Wentao Feng, Wengang Wang	520
Reliability Assessment of Distribution Networks Considering Wind Power and Source Load Uncertainty	527
Ningtao Fu, Dingkang Liang, Zewen Ma, Yinglong Li, Jiakai Feng, Ronghao Zhang	
A Strategic Review of Electrical Distribution Network Practices for Policy Change	533
Rajasegaran Thevaraj, Kein Huat Chua, Jianhui Wong, Yun Seng Lim, Gunasegaran Reddy, Ashvini Bhupalan, Wang	Li
Secondary Frequency Control Strategy of Distribution-Level Virtual Power Plant	543
Zilin Zhuang, Xiaobo Dou, Liting Yu	
> Fault Identification and Location	
Identification Method about Abnormal Synchronization of WAMS Data	549
Chen Fan, Hui Ren, Guoqing Zhao, Hao Ren, Feiyang Xu, Qingwei Wang	
FNN-based Ground Fault Identification Method for 10kV Distribution Networks	554
Xiaofeng Chen, Shengwen Shu, Jian Wang, Yanhui Zhang, Zhenjia Li, Yun Xie	
Fault Localization in Active Distribution Networks Based on State Estimation	i60
A Partial Discharge Recognition Method and System Architecture for IoT Ring Main Unit6	65
Zhengkun Song, Hongwei Li	
Optimizing Multi-Failure Repair and Recovery in New Power Systems During Extreme Disasters	570
Classification of Power Transformer Faults Using ANN	575
Wasseem Alkhardawi, Abdulaziz Alshalawi, Husain Al-Daweesh, Yaseen Saleh, Mohammed Alzyod, Saad Algar	rni
A Novel Transmission System Fault Identification Method Based on K-Nearest Neighbour Algorithm	580

	Complex Power System Modeling and Robust Control Strategy	
Gri	id-Forming Control Technology for New Energy Converters Based on New Power Systems	687
	Qiang Bo, Xuhui Shen, WeiGuo He, Xiaojiang Guo, MingZhi Fu, Lei Ba, Qiang Ma, Xingguang Jiang	
Stu	dy on the Characteristics of Two-phase Flow in Turbine Based on Roughness	693
	Shuang Liu, Dali Ding, Zhenlei Hao, Na Lei	
Da	mping Enhancement Control Strategy for Grid-forming VSG Based on Active Power Feedback Compensation	696
	Wenguang Zhao, Xiaoming Wang, Haizhen Xu, Changzhou Yu, Qinglong Wang, Jianming Su	
Re	search on Electromagnetic Transient Simulation Calculation of 500 / 1000kV GIS Operation Test Platform	703
	Lei WAN, Hao WANG, Lei WANG, Yu ZHANG	
	e Influence of Surface Defect Characteristic Factors of Wind Turbine Blades on Defect Detection Difficulty umplex Working Conditions	
	Yingxin Deng, Xiangjian Zhang, Shuai Shao, Xun Ye, Yufeng He, Zijian Wang, Hongbo Liu	
Bu	s-Capacitor-Based Multi-path Equalization Topology	714
	Wei Jiang, Zongfa Weng, Rui Cao, Bo Wang, Li Hao, Yang Chen	
Ag	gregation of Distributed Resources in Distribution System Based on Distribution System Security Region	720
	Zekai Qiu, Yuhang Lei, Minna Dou, Xiaoqing Zhang, Zhihua Zhang, Bintao Fan, Lirong Wang	
Re	search on Electromagnetic Transient Process Simulation Calculation of ± 800kV UHVDC GIL	725
	Lei WAN, Ze YIN, Weiming YANG, Xiangyu YANG	
Не	at Conduction Analysis and Optimization of the Thrust Bearing Cooling System in Hydraulic Turbines	730
	Jiage Shan, Dali Ding, Shouman Chen, Sijia Fan, Jiayi Zhao, Wei Han, Zhe Hou, Shuang Liu	
>	Fault Diagnosis and Status Monitoring in Power System	
Ga	ussianNB-based Anomaly Detection Method for Automotive Motor Bearing	736
	Zuoshuang Chen, Dongdong Zhang, Hongyu Zhu, Hongtao Huang, Lijie Yang, Tuoyu Chen	
Fau	alt Ride Through Control of Grid-Forming Converter Based on Inverse Time-Gradient Current Limiting	742
	Haoyuan Li, Yibin Tao, Guanjun Li, Guowei Chen	
Qu	antitative Analysis and Influencing Factors Research on Valve Internal Leakage in Thermal Power Unit	748
	Tao Jin, Ruizhou Guo, Fengsheng Jia, Xinghua Yuan, Zihao Guo, Chengbing He	
	rgle-phase High-resistance Ground Fault Detection Method for Flexible Grounding Systems based on Phase Cuscrimination	
	Peipei Liu, Chunyan Peng, Li Zhou	
Re	liability Assessment of Integrated Energy System Considering Gas and Thermal Pipeline Leakage Failure	759
	Maosen Cao, Changzheng Shao, Bo Hu	
Op	timal Scheduling of Integrated Energy System Considering Gas and Thermal Pipeline Leakage Failure	764
	Maosen Cao, Lanling Wang, Junyi Cai, Lin Huang	
An	alysis of Voltage Support Mechanism for Asymmetrical Short-Circuit Faults in Power Electronics-Based Sys	
••••		769
	Shiyu Mo, Kun Hu, Kui Luo, Yiran Jing, Liangyi Zhang, Erxi Wang	

Reliability Evaluation of IEGS Considering Multi-States Leakage of Pipelines
Yu Tang, Fei Mei, Tongtong Feng, Tianxiang Zhou
Impact Mechanisms of Rotating Rectifier Faults on the Multiphase Brushless Excitation System in Nuclear Power
Yuang Cai, Liangliang Hao, Shuya Zhao
Fault Diagnosis of HCSY-MG Microsource Power Abnormal Fluctuation Based on Multi-feature Fusion CNN78 Xinzheng Jin, Lingxia Zhao, Hailiang Wang
Research on Strategies for Enhancing Transient Stability in Power Systems with Large-Scale Electric Vehicle Chargin Infrastructure Integration
Shun Li, Yi Long, Xiaorui Hu, Tingting Xu, Zhenguang Jiang
Convolutional Neural Network-Based Fault Detection in Distribution Networks Using Voltage Magnitude Measurements
Mengzhao Duan, Wenyi Zhang, Junyu Chen, Yibo Ding, Wenzhuo Shi, Xudong Li, Zhao Xu
> Joint Voltage Control and Safety Assessment in Power System
DDPG Based AVC Joint Voltage Control Method for Hydro-Photovoltaic Complementary System
Tong Su, Chunyan Li, Xu Jiang, Fangyi Gu, Yujin Quan
Study on Closing No-load Line Switching Overvoltage of Outgoing Lines of 500kV Pumped Storage Power Static
Ying Lou, Binqiang Xia, Guowen Hao, Lei Wan, Liang Tang, Pinlei Lü, Tong Zhou
Analysis of Voltage Instability and Governance Strategies for Islanded power system of Steel Enterprise
Research on the External Electromagnetic Interference Influence on the Errors of Low Frequency Voltage Transforme
Zihao Xu, Changqing Ma, Le Han, Zhe Yang, Zhenfei Chen, Qiyu Jiao
Research on Voltage Reconstruction Method for Double-Circuit Lines Based on Spatial Electric Field Decoupling
Bangjie Xia, Fuchao Li, Ziyang Ye, Yankai Xing, Yalong Mai, Jian Li
Research on Insulation Performance of Low Frequency Potential Transformer
Changqing Ma, Jiayi Zhang, Xihan Sun, Qiyu Jiao, Le Han, Zihao Xu
Response-Driven Identification of Voltage Instability in AC/DC Hybrid Grid with New Energy
Zewen Ding, Zhuan Zhou, Qichao Chen, Fei Wang, Junyu Liu, Chongyang Dang
Voltage Sensitivity Estimation in Distribution Networks with Incomplete Measurements and Unknown Topologic
Zhen Wang, Xiaohua Ding, Jingtao Zhao, Shu Zheng, Yuan Li, Xiaoyan Zhang
Coordinated Voltage Regulation of Distribution Network and Multi-Microgrids via Attention-based Transferrement Learning
Yi Zhang, Xiaobo Dou, Yu Shen, Wei Hu
Analytical Modeling and Design Methodology of Trans-Inductor Voltage Regulator with Fast Response

Analysis and Protection Research on Switching Overvoltage Characteristics in GWh-Level Cascaded High-Voltage Battery Energy Storage Systems
Ting Lei, Jianhui Ji, Gaoxian Du, Haibin Shen, Xia Zhao, Xiujuan Chen
A Voltage Optimization Control Method for Distribution Network Based on the Collaboration of Electric Two-Wheeler Battery Swapping Cabinets and Distributed Energy Storage
 Load Forecasting and Simulation Calculation in Electrical System and Equipment
Non-intrusive load monitoring for public buildings based on ResNet and Transformer
Lijie Yang, Meihui Jiang, Tuoyu Chen, Zuoshuang Chen, Lu Zhang
Multi-task Power Load Forecasting in Urban Cities Considering User Category and Data Characteristics882
Yu Zhang, Yiyan Li, Zizhuo Gao, Zelin Guo
Clustering of Daily Load Curves Based on Graph Convolutional Network
Chun He, Shilin Gao, Xu Zhou
Short-Term Load Forecasting Based on the IPSO-VMD and IGWO-BiGRU
Run Han, Jin Li, Yun Liu, Han Xu, Jinglin Luo, Yi Hu
Research on the Assessment of Potential and Scheduling Strategy for Air Conditioning Load Clusters Aggregation Response Considering Users' Comfort
Jingyu Liu, Chuan He, Yanghui Ding, Jun Tan
Source-Load Complementary Optimal Scheduling Based on the Synergy of Green Certificate and Tiered Carbon Trading Mechanisms
Haolun Liu, Zicheng Wang, Jianghao Hu, Yunrong Chen
Accumulated Temperature Effect on Rhythmic Urban Electric Load
Yi Wu, Wei Yang, Yuezhong Tang, Zenghui Xi, Tangyun Xu, Li Wan, Xuzhe Qian, Benyao You, Jiamin Yao, Yucheng Ji, Yi Sun, Bo-Wei Qin, Wei Lin
Design and Verification of a Load Forecasting Model for Charging Stations Using Image Classification920
Ling Yu, Zhongbin Zhang, Kai Zhang, Bin Zhu, Jiexuan Yu
Evaluating Load-Price Correlation: Case Study from a Park-Level Charging
Yang Wang, Zhukui Tan, Jianshu Zhou, Hong Liu, Ling Tan, Jianping Yang, Yue Xiang
Real-time Optimization Scheduling Method for Electric Melting Magnesium Load Based on MPC931
Qihuitianbo Liu, Jiubo Zhang, Liaoyi Ning, Hengyu Liu, Jiazheng Sun, Bowen Zhou
Load Forecasting for Classified Agency Electricity Purchasing Customers Based on Electricity Usage Characteristics Analysis
Rui Lu, Yankun Feng, Minyi Zhuo, Qiang Li
Study on Economic Operation of Multi-type Load Demand Response in Park with Shared Energy Storage945
Mingguang Zhang, Pengyang Ma, Faquan Yang, Changsheng Jiao

➤ Large-scale Electric Vehicle Charging and Discharging Control and Regulation Technology	
Research on Demand Side Resource Optimization and Scheduling Method for Power System Including Electric Vehic	
Mingguang Zhang, Jiameng Zhao, Shengli Zhao	
Optimal Sizing and Placement of Electric Vehicle Charging Stations Based on MOMA Algorithm	957
Min Cheng, Zhen Pan, Feipeng Huang, Kui Li, Lishan Wei	
Research on Energy Consumption Management Path of Pure Electric Passenger Cars	963
Liu Zhichao, Chen Chuan, Liu Shaohui, Zheng Tianlei, Lv Li, Zhang Weijia	
Multi-Label User Portrait Model for Charging Station Demand: Design and Verification	971
Ling Yu, Qinghang Ran, Kai Zhang, Bin Zhu, Jiexuan Yu	
Planning Methods of Electric Vehicle Battery Swapping and Charging System in Low-carbon Urban Transportation Power Networks	
Tuoyu Chen, Fengjie Chen, Zuoshuang Chen, Dongdong Zhang	
Smart Predictive Energy Management Strategy for Range-Extended Electric Vehicles Using SiC-based Po Electronics	
Yu Li, Tiande Mo, Tianqi Li, Yunhe Hou, Fengxiang Chen, Qinfei Long	
Electric Vehicle Charging Scheduling Optimization Considering Charging Urgency	990
Haodong Zhao, Jiajun Meng, Junhong Yang, Liancheng Zhao, Nana Liu, Jianxin Zhou, Kehao Wan, Jun Wang	3
Research on Electric Vehicle Charging and Discharging Optimization Strategy Based on Multi-strategy Integrated Zeo Optimization Algorithm	
Junqing Mu, Jinxue Sui, Li Yang, Zuoxun Wang	
Optimal Charging Guidance Strategy for Electric Vehicle Relying on User Satisfaction	003
Hengjie Li, Jiahao Li, Junfeng Zhou, Yun Zhou, Haojing Wang, Kaiyu Zhang	
Optimizing Electric Vehicle Charging Networks: A Multidimensional User-Centric Approach	009
Dong Yan, Xianbo Ji, Rui Wang, Bin Zhu, Kai Zhang, Jiexuan Yu	
▶ Photovoltaic Integrated System and Photovoltaic Power Generation Forecasting	
Review on distributed photovoltaic carrying capacity optimisation algorithms for distribution networks	015
A 58% High Efficiency Photovoltaic Converter for High Voltage Grid Monitoring Applications	021
Jianguo Wei, Weilin Liu, Dengfeng Ju, Xiaochen Niu, Veikka Nikander, Arto Aho, Ville Polojarvi, Chun Xiao	
Dynamic Scheduling Optimization of Photovoltaic-Energy Storage Charging Station Considering Electric Veh	
Charging Guidance Strategy	027
Frequency Stability Analysis with Renewable Energy Integration: Assessing the Impact of Photovoltaics on Ultra-I Frequency Oscillations	
Zeng Pijiang, Zhang Zheming, Sai Xiangyu, Gan Deqiang, Xu Hao, Ye Pengju	
The Impact of Technological Innovation on the Development of China's Photovoltaic New Energy Industry	039

Photovoltaic Power Prediction Model Based on Meteorological Factors and TCN-KAN Model
Qianqian Wu, Zicheng Wang, Yuening Shi, Guangdi Li
Research on Supply-Demand Analysis and Adaptation Measures of Ramping Ancillary Services under Large-Scale P
Development—A Case Study of China Henan Power Grid
Fuqiang Zhang, Jinfang Zhang, Hujun Li, Boning Yu, Mengying Gan
Wind and PV power prediction based on disclosure forecast bias and GRU model
Caixin Sun, Hongda Pu, Dezhi Wang, Jianqiang Hu, Xiaokui Ren, Li Hong, Hongce Wang, Zhi Cai
A Multi-Physics Field Coupling Simulation Approach for Photovoltaic Power Stations
Yuanqing Yao, Yibo Wang, Fan Qin, Chen Huo, Weiwei Chen, Jing Liu
A Short-Term Photovoltaic Power Forecasting Method Based on Meteorological Data Using GRF-LSTM-XGBoo Model
Tong Zhao, Liang Huang
Power Generation Prediction of Photovoltaic Based on the XGBoostenhanced CNN-LSTM-Attention Model 107
Wenbin Zha, Dongsheng Cai, Linlin Li
> Advancing Planning, Operation, and Regulation in Emerging Multi-Agent Green
Open-Winding Fault-Tolerant Three-Vector Current Control Based on Current Ripple Reduction
Hongtao Huang, Xiaogang Lin, Dongdong Zhang, Min Sun, Zuoshuang Chen
Collaborative Peak-shaving Framework of Combined Gas-hydro Power Systems Considering Deep Peak-shaving Compensation
Wei Yang, Maoyu Mao, Youjun Deng, Anan Zhang
Research on Air Clearance of VSC-HVDC Converter Station
Dong Jianzheng, Zhang Jumou
An Evaluation Method for Reactive Power Compensation Schemes Considering Reliability and Resilience in Energy Power Systems Using CF-AHP Method
Liqing Zhang, Tianjun Jing, Shengduo Shi, Zhuohui Zhang, Jinming Zhang, Xin He
Design and Verification of the Electric Power Capacity Guarantee Mechanism Adapted to the Requirements of China Energy Transition Development
Huang Wenyuan, Geng Simin, Liu Yuhang, Shi Xinhong, Zheng Yaxian, Cai Zhi
> Microgrid Coordinated Operation and Economic Dispatching
Microgrid Operation Scheduling: Ensuring Frequency Stability for Seamless Islanding
Gu Zhiming, Li Bo, Pan Tingzhe, Zhang Guipeng, Li Bo, Xu Di
Economical Optimization Scheduling of Microgrids Based on Improved Distributionally Robust Optimization 111
Jiaming Hai, Jie Hui, Yanxiang Hao, Gan Zhang, Kunchi Yang, Yan Li, Dawei Liu
An Optimization for Capacity Configuration of Photovoltaic-Energy Storage Microgrid Considering the Solar Power curtailment rate
Jiayuan Qing, Shi Jing, Yincheng Zhao, Sen Zhang, Hao Wan, Yihang Cao

	ep Reinforcement Learning Based on Binary Search for Distribution Network and Microgrid Cooperative Optimal neduling	
	Jiahui Jin, Guoqiang Sun, Xing Luo, Yaping Li, Lu Shen, Wenbo Mao	
Stu	Study of cooperative management strategies in interconnected microgrid clusters via ADMM-based optimization	
	Mingguang Zhang, Faquan Yang, Pengyang Ma, Hao Yan	
Im	proved Droop Control Strategy Based on Adaptive Virtual Impedance In a Microgrid System1137	
	Longyang Zhu, Yibiao Huang, Yifan Wang, Chuanjie Lin, Jiawei Cai, Xiaoyu Dai	
Eco	onomic Dispatch of Microgrid with Hydrogen and Energy Storage	
	Yilin Wen, Bin Che, Weiqi Zhang, Chuan He, Lu Nan	
>	Electrification Standards and Reliability Assessment in Power System	
Re:	search on the Current Status and Standard System of IEC Standards for Sustainable Electrified Transportation	
	Xingzhu Chen, Lili Li, Mingliang Xue, Feng Ni, Xuling Li, Shanshan Shi	
Th	e Comprehensive Evaluation of DG Grid-Connected Plans Considering Danger Level of Indices	
	Chao Cheng, Chuanjia Han, Qian Shan, Tingting Zhao	
Re	search on the Construction and Practice of the Technical Support System for Power Supply Guarantee in Major Events	
	Yuying Li, Jindou Yuan, Chang Liu, Mingyu Yang, Meng Li, Mingming Pan	
Enl	hancing Reliability of Offshore Facilities Power Supply System	
	Wasseem Alkhardawi, Mohammed Al-Muhaini	
Ma	nagement of Enhancing Wind Power Penetration in Grid-Connected Hydrogen and Ammonia Systems	
	Yuanlong Zhao, Kunpeng Shi, Haodong Zhao, Junhong Yang, Liancheng Zhao, Kunpeng Tian, Xianbo Wang, Jun Wang	
ΑÌ	Novell Protection Risk Identification Method for Intelligent Substation Based on Greedy Searching	
	Hongbin Wang, Xin Wang, Ruiling Huang, Zhen Fan, Xinwen Cui, Yingqi Wang, Xiaoyang Tong	
Re	search of DC Power System Stability Analysis and Validation for Geosynchronous Orbit Satellites	
	Lili Yuan, Wei Wang, Xuan Zhang, Ran Bi, Siming Zhang, Ze Zheng	
Op	timization Method of UAV Positioning Power Line Based on Magnetoresistive Sensor Arrays	
	Dongsheng Cai, Xingyu Zhou	
Αŀ	Review of Detection Techniques for Subsynchronous Oscillation in Power Systems	
	Hongbo Yin, Dongsheng Cai, Qi Huang	
ΑI	Polynomial Chaos Expansion-Based Reserve Capacity Optimization Method Considering Reliability1202	
	Zhongxi Ou, Lihong Qian, Sui Peng, Weijie Wu, Zhen Xiang, Zelong Cai, Haoran Shen, Wei Dai	
>	Low-carbon Operation and Planning of Energy Internet	
Ca	rbon Emission Analysis of Integrated Energy Systems under Electric Vehicle Penetration	

Value
Jiaojiao Li, Pengcheng Du, Fengjie Chen, Dongdong Zhang
Planning Method for Park Integrated Energy Systems Considering Low-Carbon Retrofitting
Xunpu Jiang, Zhejing Bao, Gang Wang, Weibin He, Jianbing Yin, Yan Zhang
Research on Heterogeneous Energy Flows Carbon Emission Factors in Integrated Energy Systems
Li Tengfei, Zhang Yifeng, Liao Wei, Lin Qingming, Kang Li, Guan Jianyang, Xia Xinyu
Optimized Scheduling of Integrated Energy Systems Based on Carbon Flow Theory and Master-slave Game Model
Qi Wang, Feng Ru, Md Sazit Islam Antu, Ji Ke, Yaohua Yin, Xueshu Xing
Integrated energy system optimization planning for manufacturing enterprise parks based on life-cycle lean carbon reduction
Changhe Zhou, Tianyi Ma, Xiaojie Lin, Nan Zhang
Low-Carbon Economic Dispatch for Integrated Energy Systems Incorporating Renewable Energy Accommodation
Ling Li, Chuan He, Panlong Jin, ZeLong Zhang
An Entropy Flow Dynamic Model for Low-carbon Transition of Integrated Energy Systems
Lingtao Li, Yue Xiang, Wei Yang, Di Cao, Anan Zhang
Integrated Approaches to Carbon Trading and Demand Response for Cost-Efficient and Low-Carbon Energy System
Yaning Huang, Huidi Zhu, Xiaofei Ren, Li Wang, Peiqiang Zhang
Decomposing the drivers of CO ₂ emissions from terminal energy consumption in Sichuan, China based on LMDI methodological methodological methodological methodological methodological methodological methodological method
Shiqi Deng, Shihua Luo, Weihao Hu, Luan Chen
Design and Application of Energy IoT System with Dynamically Scalable Protocal and Security Authentication 126
Yong Chen, Liangjing Li, Hao Liang, Bo Jiang, Xueyuan Yu
> Multi-energy System Market Mechanism and Energy Optimization Dispatching
An Optimization Model for Battery Swapping Station Considering Grid Demand and User Response Sensitive Factor
Fengjie Chen, Tuoyu Chen, Jiaojiao Li, Hongyu Zhu
A Study of the Two-Way CfD Mechanism in the Electricity Market Based on Renewable Energy Source: The Case of Europe
Siting Dai, Shaoming Chen, Xinyi Peng, Yiying Li, Mengke Zhang
Research on Priority Introduction Scenarios and Strategies of ChaoJi Charging Standards in EV Market
Yang Zhang, Yi Wang, Chen Dong, Dongjie Gu, Bin Zhou, Hongyuan Yin
Research on the Dynamic Determination Method for Provincial Spinning Reserve Market Demand Considering th Intraday Inter-Provincial spot market Trading in China
Yingcong Wu, Daijiang Meng, Shuying Zhang

Considering Waste Heat Reuse Data Center Energy System Planning	296
Ying Jia, Yanbing Jia, Jiajie Liu, Zihui Wang, Jiaxing Ren	
Risk assessment of inter-provincial electricity spot market based on market correlation characteristics	301
Guodong Huang, Jiang Chang, Zhi Cai, Delin Wang, Ruiwen Zhang, Fangyu Wang	
An Evaluation Method for Intraday Renewable Energy Accommodation Capacity under Security and Stabil Constraints	•
Yan Chen, Jiang Dai, Hui Yuan	
A Novel Optimal Power Flow Method for Distributed New Energy Participation in Electricity Market	316
Chen Lyu, Menghua Fan, Zheng Zhao	
Electricity Consumption and Regional Economic Growth: An Analysis Based on Multiple Regression and Rande Forest Models	
Hongpeng Qi, Lijuan Qin, Yuankang Wei, Shimin Li	
Optimal Scheduling of CSP-PHES Integrated Systems under Wind-PV Uncertainty	329
Zhipeng Zhou, Jiandong Duan, Qi Gao, QinXing Tian	
Robust Optimization for Power Market Considering Multi-Resolution Ramp Requirements	335
Yuxuan Li, Zhi Cai, Muchen Yuan, Liming Bo, Xueting Cheng, Xinyuan Liu	
Comparative Study of Multi-energy Multi-objective Optimal Scheduling in Microbalance Area Based on Seve Meta-heuristic Algorithms	
Xichao Zhou, Bing Wang, Zishang Xu, Jinyang Zhao, Chonghao Xu	
> Application of Artificial Intelligence in Power System	
Topology Identification Method for Distribution Network Based On Convolutional Neural Network	346
New Energy Power System Frequency Evaluation Based on xLSTM	352
Yangguang Li, Jing Yan, Shilin Gao, Xiaoying Zhang	
A Magnetic Core Loss Prediction Method Based on Multi-Feature Dimensionality Reduction and XGBoost Five-Feature Dimensionality Reduction and Administration and Administra	
Shuqi Fang, Shengwen Shu, Guobin Wang, Kang Wang, Jinglan Zeng, Guangyu Shi	
Reconfigurable Streaming Architecture for AI-Based Fault Prediction of Power Equipment: Initial Analysis a Discussion	
Tian Lan, Qinwei He, Guoliang Zhang, Peng Zhang, Yuanliang Lan, Peng Li	
Artificial intelligence fault detection method in resonant grounding system based on waveform characteristics 13	368
Yang Diao, Ronghai Zhang, Shenglan Yin	
A Comprehensive Review on the Application of Artificial Intelligence in the Planning of the New-Type Power Syste	
Wang Yaoxin, Zhao Chun, Jia Lin, Shen Houming, Wu Qirui, Wang Zhuo	
Predictive Analysis of Integrated Operational Energy Consumption in Public Buildings Based on GAWOA-BiLS7 Neural Networks	
Lu Zhang, Meihui Jiang, Hongyu Zhu, Anshan Lu, Tianhao Liu	

Ad	laptive Feature-based Fusion Recurrent Neural Network for Predicting Day-ahead Prices	1389
	Jianqiang Hu, Jianqiang Hao, Liwei Shen, Xiaofeng Pan, Yuhan Wang, Caixin Sun, Cong Shen, Zhi Cai	
Spi	ike-LSTM: A Hybrid Spiking Neural Architecture for Enhancing Renewable SCR Prediction	1395
	Yawei Wei, Huayang Liang, Ying Lv, Guangming Lu	
Re	search on Commercial Building Thermal Model Based on CNN-LSTM	1401
	Yanghui Ding, Chuan He, Lu Nan, Jingyu Liu, Jun Tan	
	search on Power Prediction of Photothermal Power Generation Systems in Remote Areas Based on a GA- pupled Algorithm	
	Wanpeng Zhou, Chunlai Li, Libin Yang, Zhengxi Li, Pinkun He, Feng Xiao	
>	The Electricity Market and the Utilization of Clean Energy	
Tot	tal Transfer Capacity Evaluation Based on the Improved Repeated Power Flow Method	1415
	Junzhe Huang, Hongchun Yang, Xiangqian Xue	
	ergy Trading Strategy for Park Integrated Energy System under Shared Energy Storage Operator Participat	
	Yushuang Wen, Ran Ding, Jiaqi Chen, Yaquan Liang	
	operative Game-based Bidding and Profit Allocation Optimization for Renewable Energy Operators Consi ared Energy Storage	_
	Wei Ma, Kecheng Li, Wei Tang, Bingyu Sang, Bin Xu, Yibin Tao	
	Study on the Optimized Scheduling of Cascade Hydropower -Wind-Solar Complementary Systems Based aster-Slave Game Framework	
	Qiguang Niu, Xiaoying Li	
Ор	otimization of Multi Stakeholders in Urban Multi-Energy Systems from Game Perspective	1442
	Chenxu Yin, Yonghui Sun, Zhou Wu, Liang Zhao, Fan Sheng, Denis Sidorov	
	fined Control Performance Standard Considering Capacities of New Energy Sources and Conventional Power S Control Area	
	Guoqing Ren, Shihao Nie, Kaiyuan Hou, Lei Chen, Haiji Zhao, Xian Wu, Hongming Shao	
>	Integrated Energy System and Energy Storage Technology	
Re	serve Optimization Considering Reserve Deployment Process	1451
	Hong Zhang, Xiangsheng Liu, Zihan Wang, Shengqi Zhou, Zhipeng Wu, Chen Li	
	search on the Control Strategy of Multi-machine Parallel Operation of Grid-Forming Energy Storage Based on ontrol	
	Xinzhen Feng, Deshun Wang, Anping Hu, Jie Lei	
Re	search on a multi-level reliability assessment method for energy storage systems based on task profiles	1462
	Xingxin Guo, Wenqiang Xie, Jian Liu, Xian Zheng, Jianyu Yu	
	search on Coordination Strategy and Operation Characteristics of Supercapacitor-Battery Hybrid Energy S stem	_
	Jiao Zhou, Lei Wang, Fei Yan, Shixiong Jiang, Xiangyu Yang, Tongtong Gao	

Analysis of Advantages of Electrochemical Energy Storage Application
Yunwei Guo, Yuechen Chen, Qiang Luo, Xianyu Wu
A Method for Sequential Detection and Estimation of Battery Energy Storage Operational Data Based on the Integratio of Equivalent Circuit Models and Data-Driven Models
Kai Wang, Wanpeng Zhou, Chunlai Li, Libin Yang, Zhengxi Li, Fengxiang Liao
Hierarchical Optimal Allocation of Grid-type Energy Storage for Offshore Wind Power Based on Chaotic Mappin Algorithm
Wenlong Yang, Xiangyu Kong, Jiancun Liu, Baoyi Zhang, Ying Zhou, Shaoxiong Wei
An Adaptive Battery Capacity Estimation Method Based on Dual-Driven Fusion for Lithium-Ion Batteries in Energ Storage Systems
Kemeng Shen, Jiazhi Lei, Zhao Liu
Analysis of Grid Side Energy Storage System Based on System Dynamics Modeling and Simulation
> Smart Power Plant Optimal Operation and Dispatching
Research on Resource Allocation and Scheduling Optimization of Virtual Power Plants Considering Uncertaint
Yuening Shi, Guangdi Li, Zicheng Wang, Shuang Wang
Optimal Scheduling Strategy Of Virtual Power Plant Considering Carbon-Green Certificate Trading Mechanism
Shuang Wang, Yunrong Chen, Zicheng Wang, Zhibo Xie
Thermodynamic Analysis of a Carnot Battery Integrated with Coal-fired Power Plant
Zhiqiang HE, Junhong YU, Xiaofei ZHANG, Mingxuan SHAO
Flexibility-enhanced Planning of wind and PV Power Plants for Multiple Basin-based Clusters Hybrid wit Hydro-wind-PV
Baisi Liu, Xiangyi Chen, Ruoyun Wang, Qingxi Duan, Wenju Liang, Li Fan
Stochastic Optimization Scheduling for Virtual Power Plants Considering Photovoltaic and Load Uncertainties 153 YuFei Jin, Kan Zhang, ZhenTao Han, QiXiang Wang, JingJiao Yin, HeRong Wang
Adaptive Model Predictive Control for Electrothermal Conversion Device: A Virtual Power Plant Operation Mod
Zhijian Yang, Zhongkai Yi, Da Chen, Xi Yao, Mingguo Ren, Rongxi Guo
Optimization Operation Research of Virtual Power Plant Based on Stackelberg Game Theory
Zhibo Xie, Haolun Liu, Guangdi Li, Yunrong Chen
Different Types of Energy Storage Capacity Optimization Allocation Strategies in Virtual Power Plant Considerin Dynamic TOU And Conditional Value at Risk
Juan Zuo, Chongxin Xu, Wenbo Wang, Yupeng Huang, Tao Xu, Yu Ji
A Dual-Layer Dispatch Framework for Concentrated Solar Power Systems Considering Molten Salt Thermodynamic
Yan Xu, Zhengfeng Shuai, Feng Tian, Yongnian Yang, Lin Shi, Hongshan Liu, Huan Ma, Qun Chen