The 6th International Conference on HVDC

Program at a Glance

August 8–10, 2024
Jin Jiang International Hotel Urumqi （No. 802 Anju South Road,Shuimogou District, Urumqi ）

August 7, 2024 (Wednesday)

10:30-18:00	Registration and Sign-in	

August 8, 2024 (Thursday)

10:00-10:30	Opening Ceremony	3F Jin Jiang Grand Ballroom
10:30-13:30	Keynote Session	3F Jin Jiang Grand Ballroom
15:00-16:00	Special Forum: The Belt-and-Road Energy Development Dialogue	3F Jin Jiang Grand Ballroom
16:20-18:20	Panel 1: Key Technologies and Advanced Equipments for HVDC Transmission System in Large-scale Clean Energy Bases	3F Jin Jiang Grand Ballroom
15:00-17:50	Panel 2: HVDC Hub-Enabling an Interconnected and Transmitted Renewables	3F Hong Rui Hall
15:00-18:50	Oral Session 1: DC Transmission Technology Poster Session 1	3F Jin Xiu Hall

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August 9, 2024 (Friday)

10:00-13:15	Panel 3： Flexible HVDC Key Technology and Equipmen	3F Hong Rui Hall
10:00-13:15	Panel 4： HVDC and New Energy Flexible Grid Technology	2F Jade Function Room
10:00-13:40	Oral Session 2: Power Electronics Technology and AC/DC Distribution Network Technology Poster Session 2	3F Jin Xiu Hall
15:00-17:50	Panel 5： DC Grid-For Large-Scale Renewables Integration	3F Hong Rui Hall
15:00-18:15	Panel 6： Advanced HVDC Control and Operation Technologies for Lage-Scale Renewables Transmission	2F Jade Function Room
15:00-18:00	Oral Session 3: New Energy Converge and DC Power Grid Technology Poster Session 3	3F Jin Xiu Hall

August 10, 2024 (Saturday)

10:00-19:30	Technical Visit: ±1100KV Changji Converter Station and TBEA Equipment Exhibition

8. Technical Program

August 7, 2024 (Wednesday)

Time	Agenda
10:30-18:00	Registration and Sign-in

August 8, 2024 (Thursday)

Time	Agenda
Open Ceremony Chairman: Lianjun Shi. Secretary General of CSEE	
10:00-10:30	*Guest Speakers*
	Yinbiao Shu Academician of Chinese Academy of Engineering President of Chinese Society for Electrical Engineering The 36th President of International Electrotechnical Commission.
	Mingjiang Deng Chairman of the Xinjiang Association for Science and Technology Academician of the Chinese Academy of Engineering
	President of Xinjiang University
	Shewu Shan Chairman of NARI Group Corporation (State Grid Electric Power Research Institute) and NARI Technology Co., Ltd.
	Ya Tian General Manager and Deputy Secretary of the Party Committee of Huadian Xinjiang Power Co.,Ltd.
	Kaisaijiang General Manager of State Grid Xinjiang Power Co., Ltd.

Time	Agenda
	Keynote Session Chairmen: Kunpeng Zha, Chief Expert of State Grid Corporation of China Haifeng Lu, Dean of School of Electrical Engineering, Xinjiang University Associate Professor of Tsinghua University
10:30-10:50	*Technical Consideration on HVDC Transmission* Licheng Li Academician of Chinese Academy of Engineering (CAE) Honorary Chairman of Expert Committee of China Southern Power Grid (CSG) Honorary Dean of School of Electric Power Engineering, South China University of Technology (SCUT)
10:50-11:10	*HVDC Transmission: Historical Development and Future Trends* Marcio Szechtman CIGRE Vice President Technical Chairman of CIGRE Technical Council
11:10-11:30	*CSG Promotes the Construction of New Type of Power Systems through Technology* Hong Rao Chief Scientist of China Southern Power Grid Academician of the Chinese Academy of Engineering
11:30-11:50	Coffee Break
11:50-12:10	*Current & Future HVDC Business in Korea* Ja Yoon Koo Professor Emeritus of Hanyang University Past President of CIGRE Korean National Committee
12:10-12:30	*Innovation and Application of New DC Equipment Technology* Rong Zeng Professor and Vice President of Tsinghua University
12:30-12:50	*Recent Advances in Power Grid Hardware Technology: Insights from Academic Research* Akiko Kumada Professor of The University of Tokyo
12:50-13:10	*Prospects for the Development of HVDC in the New Power System* Yong Huang Deputy Director of UHV Division, State Grid Corporation of China
13:10-13:30	*Discussion on Large-scale New Energy Collection and Networking Scheme* Kunpeng Zha Chief Expert, State Grid Corporation of China
13:30-14:30	Lunch

Time	Agenda
	Special Forum : The Belt-and-Road Energy Development Dialogue Chairman : Ming Jin, Vice President, State Grid Xinjiang Electric Power Research Institute
15:00-16:00	*Speakers*
	Anton-Irzhi Krivtsov Corresponding Member of the Russian Academy of Sciences Dean of the Institute for Theoretical Mechanics and Mathematical Physics at Peter the Great St. Petersburg Polytechnic University in Russia
	Umarkhon Madvaliev Correspondent Member of the Academy of Sciences of Tajikistan Chief Researcher of the Physical Technology Institute of the Academy of Sciences of Tajikistan
	Qianwei Liu Deputy Director of Department of Science and Technology Innovation, State Grid Corporation of China
	Nurkhat Zhakiyev Senior Researcher of the Department of Science and Innovation, Astana IT University, Kazakhstan
	Weiqing Wang Porfessor of Xinjiang University
	Chuang Liu Founding Dean of Chinese Institute of Electric Power, Samarkand International University of Technology (SIUT)
	Yu Li Chief Engineer of State Grid Xinjiang Electric Power Co.,Ltd.

Time	Agenda
Panel 1: Key Technologies and Advanced Equipments for HVDC Transmission System in Large-scale Clean Energy Bases Chairman: Ming Jin, Vice President, State Grid Xinjiang Electric Power Research Institute	
16:20-16:40	*Research on New Ultra High Voltage Direct CurrentTechnology for New Energy Transmission* Zhanqing Yu Associate Professor of Tsinghua University
16:40-17:00	*Construction of Equipment Operation and Maintenance Decision Platform under the Background of Digital Transformation of Converter Stations* Kai Zhang Chief Engineer of Beijing Pinggao Qingda Technology Development Co.
17:00-17:20	*Research on Mixed Simulation of Digital and Analog Systems for Large-Scale Clean Energy Transmission Through Ultra-High Voltage Direct Current Transmission System* Yiying Zhu China Electric Power Research Institute Co., Ltd Deputy Chief Engineer of Power Grid Simulation Center
17:20-17:40	*Development of UHV Flexible Direct Transmission Equipment for Large New Energy Bases* Yu Lu Senior Engineer of NR Electric Co.
17:40-18:00	*Topology Construction Technology for Wide Area Collection and Transmission System of Shagehuang New Energy Base* Yanan Wu China Electric Power Research Institute Co., Ltd Director of the New Power Grid Office
18:00-18:20	*The Oscillation Risk of Flexible Dc Transmission end System For New Energy* Qiang Fu Researcher of The Hong Kong Polytechnic University

Time	Agenda
	Panel 2 : HVDC Hub-Enabling an Interconnected and Transmitted Renewables Chairman : Xueguang Wu, China Electric Power Research Institute Co., Ltd National Distinguished Expert, SGCC, China
15:00-15:25	*Advanced Modelling and Analysis Techniques for New HVDC Systems on RTDS Real Time Digital Simulator* Yi Zhang Vice-President R&D and CTO, RTDS Technologies Inc.
15:25-15:50	*Transition of Japan's HVDC Technologies* Takehisa Sakai Senior Engineering Adviser, Mitsubishi Electric Corporation Chairman of IEC TC115 for Japanese National Committee
15:50-16:15	*DC grid and FACTS (Flexible AC Transmission Systems) in Korea Power Grid* Yong-Ho Chung Technical Advisor of LS Electric Co. Ltd.
16:15-16:35	Coffee Break
16:35-17:00	*Key Technology of new Hybrid Converter for New Energy Collection and Transmission* Yuefeng Yang Chief Engineer of C-EPRI Electric Power Engineering Co., Ltd.
17:00-17:25	*Exploration and Prospect of Economic DC Interruption Technology* Yifei Wu Professor of Xi 'an Jiaotong University
17:25-17:50	*DC/DC Transformer with High-voltage and Large-capacity for Large-Scale Renewable Energy Collection and Transmission* Zhiguang Lin China Electric Power Research Institute Co., Ltd Research Director for Institute of HVDC Transmission Technology

August 9, 2024 (Friday)

Time	Agenda
	Panel 3 : Flexible HVDC Key Technology and Equipment Chairman : Yan Li, Chief Expert of DC Technology, China Southern Power Grid
10:00-10:25	*Safety and Reliability of Power Electronics: Challenges and Innovations* Chunlin Lv Assistant Professor of Xi 'an Jiaotong University
10:25-10:50	*Operation & Maintenance of the HVDC Submarine Cable Between Mainland and Jeju Island* Dongsun Son Senior Manager of KEPCO
10:50-11:15	*The Key Technical Issues and Development Direction of UHVDC's Flexibility Enhancement* Ming Li Director of State Grid Economic Research Institute DC Technology Consulting Center
11:15-11:35	Coffee Break
11:35-12:00	*Control Strategy and System Performance of VSC-CLCC Hybrid HVDC System* Jun Yang Senior Engineer of China Electric Power Research Institute Co., Ltd
12:00-12:25	*Application and Utilization of Flexible DC Back-to-Back Interconnection Technology in Load Centers of Urban Power Grid* Bo Zhu Guangzhou Power Supply Bureau
12:25-12:50	*PPI for Flexible DC Transmission Systems: Applications and Prospects* Yushan Zhao Senior Engineer of Nanjing Nanrui Semiconductor Co., Ltd.
12:50-13:15	*Key Technologies and Engineering Applications of Low Frequency Transmission* Jinlong Wu Vice General Manager of TBEA SUNOASIS CO.,LTD.

Time	Agenda
	Panel 4 : HVDC and New Energy Flexible Grid Technology Chairman : Zhiyong Yuan, Director of HVDC and Power Electronics, EPRI of CSG
10:00-10:25	*Converter Control Technology for Dominant Power Sources Integrating Voltage-Source and Current-Source Control* Xing Zhang Vice Dean of Hefei University of Technology The Electrical and Automation Engineering
10:25-10:50	*Grid-forming Technology and Engineering Practice of Power Electronics Adapted to The Novel Power System* Xuan Li Executive director of Equipment Management Department of SGCC
10:50-11:15	*Novel Power Electronics Equipment and Operation ncipl Principles Towards Future Offshore DC Network* Miao Zhu Distinguished Professor of Shanghai Jiao Tong University
11:15-11:35	Coffee Break
11:35-12:00	*Research and Discussion on the Application of Grid-forming SVG technology* Bonian Shi Deputy Chief Engineer of Beijing Sifang Automation Co., Ltd.
12:00-12:25	*Active Support Technology for Operation Flexibility and Stability of Multi-partition Power Grid Based on Flexible Direct Control* Huipan Xie Strategic Senior Technical Expert of China Southern Power Grid(CSG)
12:25-12:50	*Control Technology of Grid-Forming SVG and Its Field Application in Offshore Wind Farms* Weihuang Huang Deputy Director of HVDC department of Electric Power Research Institute of CSG
12:50-13:15	*VSC-HVDC Grid Transmission System Forming Technology* Bingjian Yang China Electric Power Research Institute Co., Ltd

Time	Agenda
	Panel 5 : DC Grid-for Large-Scale Renewables Integration Chairman : Biao Zhao, Associate Professor of Tsinghua University
15:00-15:25	*Key Technology of Large Scaled PV Collection and Generation System* Feng Wang Professor of Xi'an Jiaotong University
15:25-15:50	*Analysis of Power Operation Characteristics of High-Voltage Direct Current Transmission Technology* Yunhai Shan Beijing Huairou Laboratory
15:50-16:15	*Key Technology and Equipment Development of Flexible DC Converter Valve for Large scale New Energy Access* Junyi Sheng Vice General Manager of TBEA Flexible Transmission and Distribution Co., Ltd
16:15-16:35	Coffee Break
16:35-17:00	*Key Technologies of Huge Capacity HVDC valve for Large-sale Renewables Integration* Jianhao Zhou Rongxin Huiko Electric Co., Ltd
17:00-17:25	*Development and Engineering Application of Key Equipment for Photovoltaic DC Collection* Chengzhu Liu CEEC Beijing Power Equipment Group Co., Ltd.
17:25-17:50	*Fault Ride Through Strategy Without High Voltage Energy-dissipating Device for Island Wind Farm Connected to Grid by VSC-HVDC* Jiudong Ding Deputy Chief Engineer of the Research and Development Center Nanjing Guodian Nanzi Automation Co., Ltd

Time	Agenda
Panel 6 : Advanced HVDC Control and Operation Technologies for Large-Scale Renewables Transmission Chairmen : Yuanyuan Sun, Professor of Shandong University Ying Huang, Professor of Zhejiang University Guests : Weixing Li, Gangui Yan	
15:00-15:25	*VSC-HVDC Technology in New Type Power System* Shanshan Wang Doctoral Supervisor of China Electric Power Research Institute Co. CIGRE Member
15:25-15:50	*Research on Digital Twin Technology of MMC Converter Valve* Lingfei Li Professor-level Senior Engineer of CSG Electric Power Research Institute
15:50-16:15	*Modeling, Stability Analysis and Control of Hybrid MMC with Half-bridge and Full-bridge Sub-modules* Quanrui Hao Professor of Shandong University
16:15-16:35	Coffee Break
16:35-17:00	*Electromagnetic Transient Modelling and Simulation of Large-scale Renewable Power and HVDC Systems* Jianzhong Xu Professor of North China Electric Power University
17:00-17:25	*Recent Topologies of MMCs: To Achieve DC Fault Blocking and Higher Power Density* Shunliang Wang Associate Professor of Sichuan University
17:25-17:50	*Adaptive Grid-Synchronization Control and Energy-Strorage Emmbedded MMC-HVDC Technology for Large-Scale Renewable Power Transmission* Huangqing Xiao Associate Professor of South China University of Technology
17:50-18:15	*Design of ±500kV 2Bi-Pole Overhead Transmission Line with metallic return in the Republic of Korea* Won-jae Lee Senior Manager of Korea Electric Power Corporation

August 10, 2024 (Saturday)

Time	Agenda
10:00-19:30	±1100KV Changji Converter Station and TBEA Equipment Exhibition

9. Meals and Coffee Breaks

Date	Time	ConTent	location
August 7	18:00-20:00	Welcome Reception	J Café Buffet Restaurant, 2F
August 8	13:30-14:30	Lunch	J Café Buffet Restaurant, 2F
	11:30-11:50 16:15-16:35	Coffee Break	
	19:00-20:30	Dinner Buffet	J Café Buffet Restaurant, 2F
August 9	13:30-14:30	Lunch	J Café Buffet Restaurant, 2F
	11:15-11:35 16:15-16:35	Coffee Break	
	19:00-20:30	Dinner Buffet	J Café Buffet Restaurant, 2F

10. Technical Visit

±1100KV Changji Converter Station

TBEA Equipment Exhibition

11. Useful Information

11.1 Registration Location

Jin Jiang International Hotel Urumqi 1F Registration and Sign-in Desk

11.2 Registration

(1) Online registration: Participants who have registered online and paid the registration fee, go to the corresponding check-in counter to report the registration number, get the information package, and pay the accommodation fee at thehotel for check-in.

(2) On-site registration: You need first go to the registration desk to fill out the participant information form,get the information package, and pay the registration fee at the fee counter.

11.3 Simultaneous Interpretation Headset

Time: August 7 morning

Venue: Entrance of Jin Jiang Grand Ballroom

How to get the equipment: Delegates who need the simultaneous int erpretation equipment should present their ID cards, driver's lic enses and other valid documents as collateral to get the equipment.

Warm reminder: Please take care of the equipment and return it in time after the meeting, or pay for the loss.

11.4 Delegate Badge

You are required to wear your delegate badge to all activities of the Conference and are requested to keep it in a safe place.

11.5 Conference Secretariat

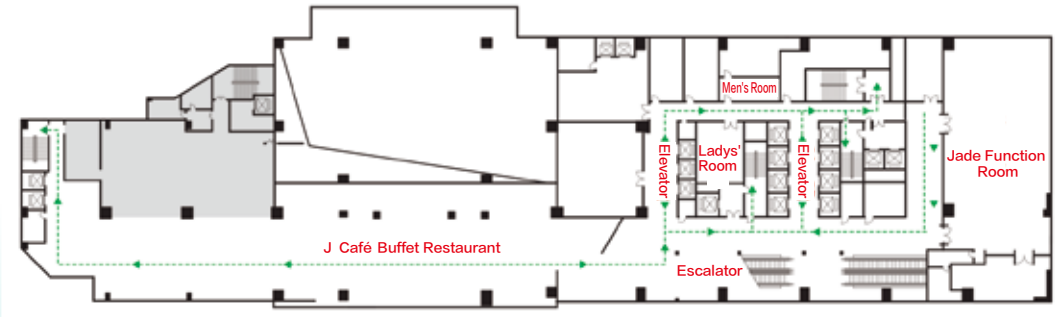
Venue: Jin Jiang International Hotel Urumqi 1F

Date: August 7-9 10:00-18:00

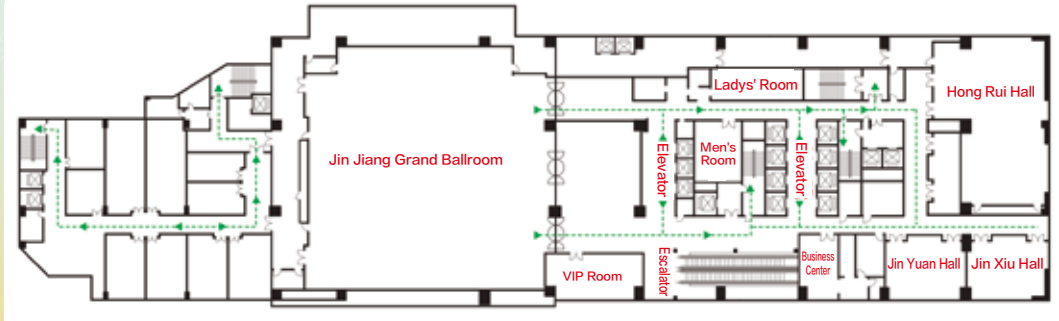
Contact: Peng Chen 13522889766
chenpeng1@sgepri.sgcc.com.cn
Ying Liang 13911570969
liangying@sgepri.sgcc.com.cn
Shuang Xia 13581596200
xiashuang@sgepri.sgcc.com.cn

If you have any problem about registration, accommodation, meals and technical visit, please contact conference secretarial.

Jin Jiang International Hotel Urumqi 2F Floor Plan



Jin Jiang International Hotel Urumqi 3F Floor Plan



14. Oral Sessions

14.1 Oral Session 1

Theme: DC Transmission Technology
Room: 3F Jin Xiu Hall
Time: 15:00-18:50

HVDC 2024CP0020	15:00-15:10
A Conservative Unified Virtual Impedance Setting Method for Grid-Forming Converters	
Qingrui Tu, Zengze Tu, Wei Liu, Jingrui Liu, Zhenxing Shao, Yujun Li	
HVDC 2024CP0022	15:10-15:20
Transient Stability Analysis of Grid-Forming Converter Based on DC Voltage Synchronization Control with Current Limiting Effects	
Jingrui Liu, Zengze Tu, Yufei Zhang, Qingrui Tu, Zhenxing Shao, Yujun Li	
HVDC 2024CP0049	15:20-15:30
An adaptive virtual impedance control strategy based on power synchronization control	
Yiquan Li, Zhenxing Shao, Qingrui Tu, Wei Liu, Kun Liu, Yujun Li	
HVDC 2024CP0068	15:30-15:40
Analysis of AbPosterrmal Hydrogen Content in 750kv Transformer Cooler Oil	
Yue Yun Kai, Feng Yun Xuan, Du Jia Bao	
HVDC 2024CP0037	15:40-15:50
Highlighted Technical Issues concerning Test TechPosterlogies of HV DCCBs	
Shenli Jia, Qiang Tang, Rene P. P Smeets, Xiyuan Liao	
HVDC 2024CP0081	15:50-16:00
Investigation on dielectric insulation properties of +/-525 kV HVDC XLPE material for high temperatures applications	
Ziwei Zhao, Muhammad Awais, Yuantao Zhao, Qi Tang, Feng Xia, Xiangrong Chen	
HVDC 2024CP0198	16:00-16:10
Research on Virtual Synchronous Control of MMC-HVDC Inverter Based on Model Predictive Control	
Xiaomin Liu, Zheng Wang, Shangke Liu, Bin Bai, Xiangnan Du	
HVDC 2024CP0202	16:10-16:20
Research on Control and Protection Technology for Equivalent Operation Test of Adaptive Flexible Valve Module	
Yuefeng Yang, Qichen Li, Jiafei Li, Chunhe Cheng, Jianbo Zhou, Keqing Cao	

HVDC 2024CP0210 16:20-16:30

Unified Grid-forming Control for MMC-MTDC Systems with Renewable Power Integration

Renxin Yang, Haiqing Cai, Mingzhang Su, Haohan Gu, Zhihao Chen, Xu Cai

HVDC 2024CP0220 16:30-16:40

Engineering Application of Valve Monitoring System for Flexible HVDC

Xiaohan Wang, Jiafei Li, Yi Lu, Yuefeng Yang, Lanfang Li, Wei Wang

HVDC 2024CP0232 16:40-16:50

A directional pilot protection scheme based on transient power amplitude ratio for MMC-HVDC grid

Yao Sun, Yanfang Fan, Junjie Hou

HVDC 2024CP0016 16:50-17:00

Research on application of self-healing metallized film capacitors of DC filter for HVDC system

Qianglin Zuo, Yanjun Zhao, Xu Han

HVDC 2024CP0018 17:00-17:10

Analysis of the Impact of HVDC Frequency Control Parameters on HVDC Power Oscillation and Interarea Oscillation

Zhixuan Li, Ying Xue, Meng Chen, Andrew Swanson, Conghuan Yang, Jingyi Li

HVDC 2024CP0040 17:10-17:20

The Development of Simulation Mirror System and its Application in HVDC

Kaijian Ou, Wencong Wu, Haiqing Cai

HVDC 2024CP0084 17:20-17:30

Analysis on a converter station 750kV AC filter circuit breaker closing resistance fault

Fei Zhang, Longfei Li, Xuefeng Han, Lei Liu, Zhaoguang Du, Zhijie Ge, Jintao Wen

HVDC 2024CP0112 17:30-17:40

Theoretical and Field Measurement Analysis of Wind Vibration Response of Lightning Rods

Lixiaoguang, Leizeyang, Zhangxiaojun

HVDC 2024CP0116 17:40-17:50

Research on a Control Strategyfor Reducing Reactive Power Exchange in ACDC Systems under Low Power in DC Engineering

Wangling, Wufangjie, Xuying

HVDC 2024CP0174 17:50-18:00

Practical Research on Controllable Line Commutated Converter in Resisting Commutation Failure Caused by Filter Switching

Chao Leng, Jia Chen, Meng Sun

HVDC 2024CP0185 18:00-18:10

Study on transient voltage characteristics of DC system by different pooling methods of wind turbines

Jianjun Ma, Jun Lu, Shuangquan Guo, Hui Song

HVDC 2024CP0089 18:10-18:20

Analysis of series magnetic connection characteristics in preventive test of UHV rheological exchange

Han Xuefeng, Li Longfei, Liu Lei, Zhang Fei, Ge Zhijie, Du Zhaoguang, Zhou Libing, Wen Jintao

HVDC 2024CP0097 18:20-18:30

Replacement scheme and insulation performance analysis of bushing on network side of 800kV converter transformer

Minkai Wang, Longfei Li, Lei Liu, Fei Zhang, Xuefeng Han, Zhijie Ge, Weining Zhang

HVDC 2024FP0066 18:30-18:40

Design of ±500kV 2Bi-Pole Overhead Transmission Line with metalic return in the Republic of Korea

Jinman Kim, Wonjae Lee, Jaekoon Kim, Duok Jung, Hoki Kim, Dongkyu Kim

HVDC 2024FP0080 18:40-18:50

OPERATION AND MAINTENANCE OF THE HVDC SUBMARINE CABLE BETWEEN MAINLAND AND JEJU ISLAND

Sehwan Joo, Dong-Sun Son, Jae-Koon Kim, Hyeong-Geun Kim, Kyeong-Seok Kim, Seong-Weon Kim

14.2 Oral Session 2

Theme: Power Electronics Technology and AC/DC Distribution Network Technology
Room: 3F Jin Xiu Hall
Time: 10:00-13:40

HVDC 2024CP0036 10:00-10:10

Research on energy storage Regulation method in DC Microgrid based on Discrete Fourier Transform

Zhen Wang, Ming Li, Hanchao Ma, Guoliang Liu, Xiao Sun, Jiajia Jing

HVDC 2024CP0054 10:10-10:20

Research on Dynamic Response of Ice-shedding of Transmission Lines in XinJiang under Coupled Operating Conditions

Yuanhao Wan, Xinsheng Dong, Yang Yang, Mingguan Zhao, Meng Li, Hongxia Wang

HVDC 2024CP0071 10:20-10:30

Research on detection method of loose bolts tower under vibration conditions

Yang Hai, Xinsheng Dong, Yang Yang, Mingguan Zhao, Meng Li, Hongxia Wang

HVDC 2024CP0106 10:30-10:40

Research on Real-time Monitoring and Early Warning Technology of Transmission Line External Force Damage based on Three-dimensional LiDAR

Suzhou Wu, Xiaojun Zhang, Hao Fu, Zeyang Lei, Haifeng Yu

HVDC 2024CP0118 10:40-10:50

Research on Full-function Test Technology of Distributed Static Synchronous Series Compensator Converter Valves

Fangling Li, Wang Liu, Li Yang, Qingqing Zheng, Hongzhou Luan, Jijun Sun

HVDC 2024CP0055 10:50-11:00

Fault Analysis and Resolution for a 35kV Dry-Type Air-Core Reactor Incident

Cunjin Shi, Shan Li, Guanghu Xu, Dingqian Yang, Zhongqiang Zhan

HVDC 2024CP0109 11:00-11:10

Analysis of Low Voltage Crossing Event Caused by Pollution Flashover of 220kV Transmission Line

Siyi Qi, Yuanhao Wan, Fang Ru-Dong, Weiliu, Zhang Xiaojun

HVDC 2024CP0124 11:10-11:20

Hybrid DC power supply technology based on CNPC for isolated microgrid containing high proportion of renewable energy

Xuan Wang, Lanfang Li, Fan Zhang, Wenming Guo, Fei Xue, Chun He, Hongxin Liu, Ying Shi

HVDC 2024CP0007 11:20-11:30

Transformer Risk Assessment Method Based on Hidden Markov Model

Zhongqiang Zhan, Dingqian Yang, Gongduo Hu, Gang Chen, Guanghu Xu, Jie Chen

HVDC 2024CP0032 11:30-11:40

Fault analysis and treatment of insufficient arc extinguishing of SF6 circuit breaker

Xinyu Zhang, Shan Li, Qian Shi

HVDC 2024CP0127 11:40-11:50

Indirect matrix converter current prediction under unbalanced input

Guoliang Liu, Min Zhu, Jiajia Jing, Xiao Sun, Yong Wang, Xing Zhuang

HVDC 2024CP0095 11:50-12:00

CDAformer: Central difference Attention Based Transformer for Synchronisation Detection of GIS Knife Gate Actions

Yang Zhang, Qiyue Li, Huan Luo, Wei Sun, Weitao Li, Xin Liu

HVDC 2024CP0153 12:00-12:10

Analysis of a ±535kV HVDC Cable Joint Breakdown Triggered by Artificial Defects

Yi Luo, Haitian Wang, Mingyu Zhou, Tobias Fechner

HVDC 2024CP0160 12:10-12:20

Dispatch Problem of Large Power Grid Material Quality Inspection Base Based on Improved Genetic Algorithm

Shuangquan Guo, Jinxin Wang, Jun Lu, Zhaoyang Dong, Longxiang Yuan

HVDC 2024CP0208 12:20-12:30

Research on Elimination Method of Remanence Magnetic in Large Power Transformers Based on Energy Storage Oscillation

Dingqian Yang, Dandong He, Manman Yuan

HVDC 2024CP0161 12:30-12:40

Research on Micro Defect Detection of GIS Basin Insulators Based on Photon Counting Measurement

Duohu, Niyaer

HVDC 2024CP0038 12:40-12:50

Quantitative analysis and optimization method of electromagnetic transient small signal broadband oscillation based on parameter sensitivity

Jian Zhang, Libo Zhang, Buyang Qi, Songtao Zhang, Haoyue Gong, Qiang Guo

HVDC 2024CP0056 12:50-13:00

A Unipolar Boosting Solid State Marx Generator

Qinghua Zhao, Ming Li

HVDC 2024CP0128 13:00-13:10

Design of cable temperature monitoring system based on RFID

Abai Zhumabieke, Chenglong Lan

HVDC 2024CP0167 13:10-13:20

Harmonic Stability Analysis of Load-Current-Detected Shunt APF Considering the Place of Reactive Power Compensating Capacitor

Qicong Guo, Hao Yi, Xin Jiang, Fang Zhuo, Zhenxiong Wang, Yang Liu, Wenbin Liu

HVDC 2024CP0065 13:20-13:30

Analysis of the Voltage-Grading Circuit for Power Electronics in HVDC CBs

Xiyuan Liao, Shenli Jia, Xiaolong Huang, Saikang Shen

HVDC 2024CP0189 13:30-13:40

MMC-PET-based Integrated Control Strategy for AC-DC Distribution Networks

Zhen. Min. Zhao, Huan. Qing. Liu, Chang. Wang, Qi. Zhao, Jing. Long. Tan,

14.3 Oral Session 3

Theme: New Energy Converge and DC Power Grid Technology
Room: 3F Jin Xiu Hall
Time: 15:00-18:00

HVDC 2024CP0069 15:00-15:10
Manufacturing technology and quality control of large transformer silicon steel sheet core
Lilongfei, Lei Liu, Fei Zhang, Dezhi Chen, Zhaoguang Du

HVDC 2024CP0070 15:10-15:20
Circulating Current Suppression of the Arm-multiplexing High-voltage DC Transformer
Zirui Dong, Ning Wang, Wenlong Hou, Yingzong Jiao, Binbin Li

HVDC 2024CP0140 15:20-15:30
Influence of Overexcitation Configuration on System Operation Risk of Tianzhong DC Thermal Power Unit
Bin Feng, Haoliang Gou, Yong Wang, Jian Wang, Hanchao Ma, Abuduwayiti. Abuduain

HVDC 2024CP0164 15:30-15:40
Large Disturbance Stability Analysis of Full DC Wind Power Generation System Based on Mixed Potential Function
Yanqing Peng, Fengting Li, Chunya Yin

HVDC 2024CP0212 15:40-15:50
Residual Electrical Life Assessment Method for Circuit Breakers Serving for AC Filters Based on Cumulative Arcing charge
Huaping Shan, Wenfeng Liao, Pengxiang Zhou, Rudan Luo, Xiaofei Yao, Zhiyuan Liu

HVDC 2024CP0151 15:50-16:00
Residual life assessment of XLPE insulated power cable based on particle swarm optimization
Hanchao Ma, Xiaojun Zhang, Guoliang Liu, Zhen Wang, Yu'E Li, Xin Zhuang

HVDC 2024CP0048 16:00-16:10
The Analysis of Current Sharing and Parameter Sensitivity for Paralleled LLC Resonant DC/DC Converter
Zhaochuan Qiu, Yingzong Jiao, Zhiyuan Wang, Zehui Jia, Binbin Li, Dianguo Xu

HVDC 2024CP0110 16:10-16:20
Development status and prospect of wind power generation in Xinjiang Region
Haifeng Yu, Xiaojun Zhang, Wenbing Zhuang, Suzhou Wu, Zeyang Lei, Siyi Qi

HVDC 2024CP0120 16:20-16:30

Multi-objective Optimization Method for Emergency Load Shedding Control Considering based on load classification

Wenxin Li, Qi Zhao, Decun Li, Lu Zhang, Xing Gao, Yinzhang Peng

HVDC 2024CP0129 16:30-16:40

Research on harmonic detection scheme of new energy grid under new power system

Weile Liang, Ji Li, Yang Kou, Yingli Huo, Alihan Bieerke

HVDC 2024CP0143 16:40-16:50

Comparative Study of AC and DC Connection Schemes for Photovoltaic Integration in Yangshan Island

Yi Lu, Qian Chen, Wenyao Ye, Peng Qiu, Haokai Xie

HVDC 2024CP0224 16:50-17:00

Economic Evaluation of UHVDC Schemes for Large-Scale Renewable Energy Integration

Ziying Wang, Qinan Li, Mingyue Han, Wei Wang, Lanfang Li, Fan Zhang, Xuefen Jin, Zheng Wei

HVDC 2024CP0205 17:00-17:10

Analysis on design defects of security power supply system in a thermal power plant

Yongqiang Liu, Chang Wang

HVDC 2024CP0010 17:10-17:20

Research on dynamic evaluation techonology of short-circuit resistance of converter transformer

Sijia Zong, Ming Li, Yunping Zheng, Yaxiaer·Tuerhon, Rifucairen Fu, Chengxuan Wang, Jiangong Ma

HVDC 2024CP0100 17:20-17:30

Research on dynamic evaluation techonology of short-circuit resistance of converter transformer

Ruyue Mai, Dandong He, Guanghu Xu, Duohu Gong, Qingchuan Zhang

HVDC 2024CP0216 17:30-17:40

Characterization of short-circuit faults within battery modules for energy storage systems

Zhicheng Li, Weijun Zhang, Biao Li, Shuling Zhang, Yuge Chen, Chaoping Deng, Yeqiang Deng, Xiaolong Gu, Yu Wang

HVDC 2024FP0146 17:40-17:50

Bipolar DC/DC Converter for HVDC to MVDC Connection with MMC and Zig-Zag Transformer

Yongho Chung, Jinhee Lee, Chulkyun Lee, Heejung Kim, Dongjoon Kim, Shenghui Cui

HVDC 2024CP0094 17:50-18:00

Robust Low-Carbon Economic Dispatch Analysis of Power System Based on Multi-Objective Optimization

Ruibang Gong, Chengxuan Wang, Junwen Cheng, Leiliang Zhang, Qiuyue Chen, Bei Dong, Yize Sun

15. Poster Sessions

15.1 Poster Session 1

Room: 3F Jin Xiu Hall

Time: 15:00-18:50

HVDC 2024CP0002	Control Strategy and Dynamic Characteristics of Voltage Source Converter Based on Time-varying Voltage Unbalance Lu Sheng, Wang Hanwen, Wang Yongfeng, Ni Weidong , Deng Hua , Wang Yuntao imlusheng@163.com
HVDC 2024CP0197	Study of Control Scheme for VSC-HVDC Interconnection Engineering Based on Cascaded Three-level Converter Shangke Liu, Mingyue Han, Yanli Xiao, Yuanyuan Liu, Rui Zhao, Fei Xue, Xiangnan Du jaydxn@163.com
HVDC 2024CP0013	Optimization of DCSC Redundancy Test Shi Shan, Wenjun Mao, Qiang Zhang 18314475491@163.com
HVDC 2024CP0015	Research on Security and Stability Risks and Control Measures of HVDC Dense Channels under Extreme Weather Zhang Zhongqing, Zhao Xiongguang, Xiong Li, Zhou Meng, Li Feng, Xi Jianghui, Jia Bo, Chen Jia 82044795@qq.com
HVDC 2024CP0025	Analysis of stress distribution in the sealing ring of converter valve under Multi-physics fields Menggan Ren, Jingying Xu, Chunming Su, Lei Zhang, Guohua Zhang, Shengfu Gao, Hao Li xujingying0730@163.com
HVDC 2024CP0033	Failure analysis of porcelain bottle rupture of a grounding electrode line of a ±800 kV DC transmission line Shan Li, Xinyu Zhang, Qian Shi zhangyu_uy@icloud.com

HVDC 2024CP0034	Design and Engineering Demonstration of Power Router Based on VSC-HVDC Transmission Lei Fu, Yongrong Zhou, Dan Sun, Lijian Sheng, Jianfeng Ren 172751612@qq.com
HVDC 2024CP0043	Combined HVDC circuit breaker and parameters design of breaking test circuit Tianyang Xu, Enyuan Dong, Yongxing Wang, Yanrong Bai, Liyan Zhang, Weiping Guan, Zhong Chen 1271667016@qq.com
HVDC 2024CP0047	Research and Analysis on the Electrical Structure and Control Logic of Valve Base Electronic Equipment at the Send-end Station of the Kunliu Long DC Project. Zhao Shiwei, Ding Binghou, Wu Xinwen whu.edu2015@outlook.com
HVDC 2024CP0052	Intelligent inspection robot motion control system for valve hall Xingwen Lian, Rongtao Li, Qiang Zhang, Yingqing Liu, Shaonan Wang, Xianen Ning Hello_lian@126.com
HVDC 2024CP0058	Fault Line Selection and Discrimination of Lugaozhao DC Line Song Xu, Zhen Yang, Qiang Zhang , Liyun Zha , Xingwen Lian , Shi Shan 18206779606@163.com
HVDC 2024CP0067	Reliability Analysis of Fuses in AC Capacitors for HVDC System Qianglin Zuo, Qiaoshu Lei, Hao Yan 759875445@qq.com
HVDC 2024CP0078	AC Filter Design for Capacitor Commutated Converter Ming Yan, Wenbin Yang, Xiaohe Wang 526619494@qq.com

HVDC 2024CP0092	The lean design of high altitude converter valve for sub-address cascade UHV DC project Shilong Gao, Yong Yang, Tao Zhang, Yuanshe Ma, Wu Chen, Haixi Zhao gaoshilong1987@163.com
HVDC 2024CP0115	Study on the Uneven Distribution of Breaker Circuit Current in UHVDC Sending-end Converter Station AC Field Qingxi Duan, Zhen Liu, Lu Zhang, Dongliang Nan, Yu Duan, Guoqi Fan duan_qx2023@163.com
HVDC 2024CP0082	Seismic vulnerability analysis of the ±800kV converter transformer before and after coupling Jinyun Yu, Weipeng Jiang, Qiang Li, Rongxing Yu, Baojun Mao, Qiang Xie 2210040@tongji.edu.cn
HVDC 2024CP0085	Multi-Infeed SCR Margin Evaluation Method Considering DC Terminal Location Selection Zhijuan Zhang, Xiaowei Yu, Minxiao Han, Hongmei Luo ynlyxyzj@163.com
HVDC 2024CP0090	Design of Controllable Line Commutated Converter Valve Control System Ming Yuan, Xiang Li, Feng Wang jim99892004@163.com
HVDC 2024CP0130	Modeling Method of Submodule-Hybrid Modular Multilevel Converters for Fast Electromagnetic Transient Simulation Shangfu Teng, Ying Pu, Wenyao Ye, Zheren Zhang, Zheng Xu, Haiyu Zhang 22360065@zju.edu.cn
HVDC 2024CP0136	Simulation Study on Charge and Electric Field Distribution of DC GIL Tri-Post Insulator under the Influence of Electro-thermal Coupling Field Wei Shi, Jingwen Sun, Jie Li, Pipei Zhang, Xuan Li, Yuan Wang lx18801239458@163.com

HVDC 2024CP0141	Typical Fault Analysis of SF6 Gas Insulated Metal Enclosed Circuit Breaker Compartment Jinxin Wang, Huayi Guo, Longxiang Yuan, Diniyaer 1536199208@qq.com
HVDC 2024CP0149	Detection of Commutation Failure in LCC-HVDC Transmission System Based on Converter Transformer Valve Side Current Dui Liu, Jietong Liu, Xiaohua Li duiliu@fjnu.edu.cn
HVDC 2024CP0150	Cooling design of HVDC converter valve in high altitude area Junyi Hou , Lei Zhang , Menggan Ren, Chunming Su , Jieru Wei zhanglei103107@126.com
HVDC 2024FP0213	Analysis of HVDC AC Fault Characteristics According to Inverter Side Short Circuit Ratio Values Yujin Kwahk, Kyuhun Park, Muhammad Usman, Il Kwon, Bangwook Lee dbwls816@hanyang.ac.kr
HVDC 2024CP0091	Analysis of freezing treatment of converter station filter in winter Jintao Wen, Fei Zhang, Xuefeng Han, Lei Liu, Zhijie Ge, Zhaoguang Du, Xinghua Xue, Wei Xia, Zhigang Wang 306431571@qq.com
HVDC 2024CP0098	Research on Intelligent Replacement Device for ±800kV Converter Grid - Side Bushing Yang Xiaojing, Zhao Wanliang, Liu Lei, Zhang Fei, Han Xuefeng, Li Longfei, Zou Libing, Du Zhaoguang 1252869162@qq.com
HVDC 2024CP0123	Optimization of unbalanced protection for AC filter capacitor bank in UHV converter station Yinzhang Peng, Chuanbao Xun, Wenxin Li, Jincheng Jiang, Xiang Wang, Qi Li 499684981@qq.com

HVDC 2024CP0162	Capacitor Voltage Balance and Energy Balance Control Strategy for Hybrid DC Energy Consuming Device Jianbo Zhou, Kefeng Wang, Huan Zhu, Yingcai Gong, Qichen Li, Luchun Du dulc1921@163.com
HVDC 2024CP0171	Contamination Level On-line Diagnosis Method of Ceramic Insulator Based on Soundprint Recognition Yong Zhao, Wei Wang, Haoyu Yang, Jiangyong Zheng 1473066491@qq.com
HVDC 2024CP0172	Research On Modeling And Simulation Of Ultra-high Voltage Direct Current Transmission System Based On ODE Equation Junjie Lan, Jinlin Wei, Dabin Huang, Hao Li, Xiang Ju, Liyun Zha, Pu Li, Nuozhou Liu, Peng Jiang 13276603982@163.com
HVDC 2024CP0184	Evaluation of Electromagnetic Shielding Performance for the Monitoring Unit Shield of an Ultra-high Voltage Converter Valve Guangxin Jiang, Jin Liu, Jianan Zhang, Lin Zheng, Qiang Zhao, Tianshu Sun zjnde@126.com
HVDC 2024CP0186	Research on the Design of Main Circuit Parameters of CSC-MMC DC Transformer Jie Li, Yilin Wu, Zhiguang Lin, Kailong Chen, Chong Gao, Zhiyuan He 1753898567@qq.com
HVDC 2024CP0191	Study on high voltage crossing strategy of wind farm considering active and reactive coordinated recovery Jisheng Mo, Chunya Yin, Fengting Li 1171035908@qq.com
HVDC 2024CP0196	Review of the Application of Short Circuit Ratio in the Stability of Grid-Connected Power Electronic Systems Wei Liang, Rongze Pang, Chong Wang, Xueping Pan wliang1988@163.com

HVDC 2024CP0199	A method for suppressing commutation failure based on dynamic adjustment of the minimum extinction angle of thyristors Yongtao Chen, Chong Zhang, Ruiling Huang, Nan Deng, Hongbin Wang, Xueguang Wu 1282770959@qq.com
HVDC 2024CP0203	Deep Transfer Learning Based Bearing Fault Detection Method for Valve Cooling System Shengfu Gao, Guohua Zhang, Hao Li, Miaosheng Qiu, Anbing Wu qiums@goaland.com.cn
HVDC 2024CP0204	Additional Droop Capacitor Voltage Control Strategy of Sub-modules for MMC in Receiving End Qiang Fan, Yajun Lu, Lin Liu, Jinping Sun 13910548020@163.com
HVDC 2024CP0207	A novel LCC HVDC transmission technology based on the Static Var Generator and Filter Weimin Ma, Xiaolin Shen, Chenguang Liang lcgzzu@163.com
HVDC 2024CP0211	Research on the Configuration and Capacity Calculation of DC Side Dynamic Braking System Yubai, Yuexi Yang, Xiao Zhou, Zhenyu Du, Yinghong Hu, Yu Li enjoylfyu@163.com
HVDC 2024CP0215	Study on the operation characteristics and the electrical stress extraction method of VSC Qichen Chen, Lingfei Xiong, Tan Li, Yiming Zhang, Linzhen Fan, Mingze Gang 13880419650@163.com
HVDC 2024CP0218	Problems Analysis and Improvement for Restance Type Neutral DC Current BLocking Device Used in Converter Stations Jianshuang Kang, Degui Yao, Guohua Zhang, Fengqi Li, Jun Li, Jun Zhang, Di Zhang, Lu Chen kangkang9337@126.com

HVDC 2024CP0222	A Comprehensive Performance Evaluation Method of the Distributed Common Grounding Electrode Yutong Jiang, Zhihui Zheng, Shangmao Hu, Gang Liu, Yongcong Wu, Hansheng Cai, Hailiang Lu 1417923620@qq.com
HVDC 2024CP0223	Key TechPosterlogies and InPostervation Prospects of Large-Capacity Voltage Sourced Inverter in the Construction of New Power Systems Weimin Ma, Ming Li, Yinglin Xue, Yingxin Wang 13620754288@163.com
HVDC 2024CP0225	Dynamic No-load DC Voltage Control Strategy for High-voltage DC Transmission Jun Li, Dongbin Lu, Xiang Yu, Lingling Xu, Wei Liu, Xiaohui Liu ludongbin@nrec.com
HVDC 2024CP0227	Cooperative control strategy for power balance of VSC-MTDC system Chenlin Ren, Yuming Ye, Kepeng Xia, Junyang Wang wjy946997@163.com
HVDC 2024CP0228	Optimization design of gate trigger circuit of thyristor triggered by converter valve Peng Jiang, Lingyu Zhu, Xiaonan Yang, Jiali Ren, Yuning Zhang, Jijun Sun, Zhiquan Guo 848393328@qq.com
HVDC 2024CP0234	Research and Engineering Application of Controllable Line Commutated Converter Valve-Control System Liang Zhou, Heng Nian, Hong Liu, Jun Yang, Hongzhou Luan, Yonghui Niu, Jinzhao Hu 13810338015@163.com

HVDC 2024CP0237	Reliability Evaluation and Weak Link Identification of HVDC System Considering Environmental and Weather Factors Ming Fang, Hua Pang, Xian Fu, Lijuan Huang, Qingming Xin, Ting Hou, Lingfei Li, Yining Zhang inget1998@qq.com 1377738930@qq.com
HVDC 2024FP0083	Analysis of Power Oscillation Damping Performance in Grid-forming VSC HVDC System Using RTDS HILS Jae-Hyuk Kim, Hyung-Seung Kim, Jung-Won Hong, Jun-Chol Lee, Hong-Ju Jung jhk0125@hyosung.com

15.2 Poster Session 2

Room: 3F Jin Xiu Hall

Time: 10:00-13:40

HVDC 2024CP0004	A Transformer Substation Defect Detection Method Based on Multimodal KPosterwledge Graph Zhenyu Guo, Tao Zhu, Daojun Huang lishuo@transcene.cn
HVDC 2024CP0005	IoT and deep learning based method for detecting aPostermalies in power system operation status Ruibang Gong, Chengxuan Wang, Junwen Cheng, Leiliang Zhang, Qiuyue Chen, Bei Dong, Yize Sun 1551516640@qq.com
HVDC 2024CP0008	Research on the design method of naPostercrystalline high-frequency transformer Fan Wu, Tengfei Guo, Yu Ai, Shaoyong Chen, Jianqiang Liu, Yu An 22121525@bjtu.edu.cn
HVDC 2024CP0019	Research on Impact Mechanism of High-Frequency Interference from Power Electronic Equipment on PD Monitoring of High-Voltage Cables Xizhou Du, Zhoufei Yao, Yan Chen, Hao Li, Zongqi Wang, Xing Lei wzongqi@mail.shiep.edu.cn
HVDC 2024CP0021	Research on Residual Magnetism Elimination and Measurement Techonology for Ultra-high Voltage Converter Transformers Zhicheng Pan, Jinzhuang Lv, Jun Deng, Heng Wu, Haibin Zhou, Zhicheng Xie panzhichenghk@qq.com
HVDC 2024CP0027	Analysis and treatment of heat generation of isolation switches used in converter stations Li Rongtao 56994987@qq.com

HVDC 2024CP0062	Based on the characteristics of the transportation network,the location of the charging pile is determined Chenglong Lan, Abai Zhumabieke, Yaxar•Turgun 1583534418@qq.com
HVDC 2024CP0079	Application of improved finite set predictive control in three-level inverter Jiajia Jing, Yu Zhang, Xiao Sun, Guoliang Liu, Zhen Wang, Yong Wang 1508186294@qq.com
HVDC 2024CP0119	The Fault Diagnosis Method of Photovoltaic DC Transmission Line Based on the Current Polarity Zero-Crossing Characteristics Jian Ma, Xiaoxiao Qi, Zhen Liu, Xiaoyun Wang, Xing Ma, Weihong Zao symajian@icloud.com
HVDC 2024CP0125	Meta-learning and U-Net hybrid-based defect identification method for converter valve thyristor gate pole line shedding defects Tianqi Li, Menggan Ren,Jie Huang, Hongzhou Luan, Bin Chai, Da Xu ltqwhy@163.com
HVDC 2024CP0126	Research on the improved control strategy of grid-connected inverter under the background of new power system Jiajia Jing,Xiyuan Yang,Min Zhu,Xiao Sun,Guoliang Liu,Yong Wang 1508186294@qq.com
HVDC 2024CP0148	A Low Voltage Ride-through Control Strategy For Multi-Ports Energy Router Based On Positive And Negative Sequence Composite Limiting Junda Qin, Bingjian Yang, Weitao Yang, Wenxiang Wu, Chong Zhang,Panpan Liu junda_qin@163.com
HVDC 2024CP0155	Research on modeling of thermal storage electric heating and peaking strategy in South Xinjiang region Rifucairen Fu, Haiyang Wu, Ming Li, Ji Li, Niyaer Di 15931580890@163.com

HVDC 2024CP0158	Fault Recognition Method for Isolating Switch Infrared Images Based on HOG Feature Shuangquan Guo, Jun Lu, Jinxin Wang, Zhaoyang Dong 1536199208@qq.com
HVDC 2024CP0175	Research on Control Strategy of C-NPC for DC Distribution Network Menggan Ren, Yonghui Niu, Nan Cao, Hongzhou Luan 13810338015@163.com
HVDC 2024CP0176	Research on Key Techonology of C-NPC for DC Distribution Network Yonghui Niu, Menggan Ren, Jun Zhang, Chunyan Cui, Fei Xue, Hongzhou Luan 13810338015@163.com
HVDC 2024CP0190	Adaptive Power Coordination Control Strategy for Flexible Interconnection of Low Voltage Distribution Stations Yang Li, He Wang, Xiaolong Yang, Daqian Zhang, Xinxin Meng 1738578965@qq.com
HVDC 2024CP0193	Thermal failure analysis of IGBT based on the delaminations in the backside metal films Jinwen Wang, Wei Yin, Xin He, Jun Wang, Qingyuan Hua wjw2921129177@163.com
HVDC 2024CP0200	MMC-CLCC Hybrid Direct Current Transmission System and Its Control Strategy Nan Deng, Bingjian Yang, Jun Yang, Haiwei Jiang, Guangshuo Liu, Bin Xu 1071613831@qq.com
HVDC 2024CP0011	Neural Radiance Field Reconstruction Technique under Layer Training Strategy Duiping Wu, Yuan Li, Rui Yang, Shenglong Li, Quanlei Qu, Jie Shen 2627751949@qq.com

HVDC 2024CP0209	A Digital Active Gate Driver for Parallel-connected IGBT in DC Circuit Breaker Applications Hangyu Xu, Xuequan Huang, Jinkun Ke, Jiancheng Bai, Zhaoliang Guan xuhangyu1990@126.com
HVDC 2024CP0226	Detection Method for Abnormality in Corridor Environment of Transmission Line Based on Improved YOLOv5 Zhenzhen Gao, Jin Cheng, Junying Ren 1914098274@qq.com
HVDC 2024CP0179	Intrusion Detection Algorithm based on CNN and LSTM Xiaofei Huang, Fei Shu, Zhiqiang Peng, Kunsan Zhang, Wei Ma 2936645439@qq.com
HVDC 2024CP0230	Diagnostic diagnostic system based on random forest algorithm -based power distribution room simulation circuit Weifeng Zhang, Chongxin Liu, Hao Sun, Xingong Cheng, Weijie Huang zhangweifeng1022@163.com
HVDC 2024CP0137	Structural Vulnerability Study of AC-DC Hybrid Grids Considering the VIKOR Method Huan Jiang, Baoyu Zhai, Yang Kou, Shuchao Liang Shuchao, Haiyang Wu, Xinyang Li, Yunshan Wang 1327372254@qq.com
HVDC 2024CP0231	Visual power distribution room fault detection system based on KNN algorithm and Unity3D engine Xingyu Li, Chengxin Qu, Menghua Zhang, Xingong Cheng, Weijie Huang lixingyu0841@163.com
HVDC 2024CP0235	Principle and system performance of flexible-commutation converter Jun Yang, Fangjie Wu, Jialin Zhang, Yiming Ji, Purui Wang, Jing Zhang, Tingting Li 1436696250@qq.com

HVDC 2024CP0157	Research of a 4H-SiC MOSFET with thick oxide layer and split gate structure Haiyang Wu,Baoyu Zhai, Yunshan Wang, Huan Jiang, Xinyang Li, Jinxin Wang 15931580890@163.com
HVDC 2024CP0219	Research on the Oscillation Mechanism of Insulated-Gate Bipolar Transistor in Short-Circuit Test Li Weibang, Dong Zhiyi, Zhou Liang, He Xin 15931580890@163.com
HVDC 2024CP0236	Prediction of Remaining Useful Life of IGBT Based on Improved Long Short-Term Memory Network Shuntian Xie, Wenbo Luo, Lingfei Li, Ting Hou, Xiaojun Tang, Yihong Huang houting7696@foxmail.com
HVDC 2024CP0135	Design and optimization of magnetic shielding of high current transformer based on finite element simulation technique Alihan Bieerke, Ji Li, Lei Xu, Yingli Huo, Yang Kou, Weile Liang alihanhit@163.com

15.3 Poster Session 3

Room: 3F Jin Xiu Hall

Time: 15:00-18:00

HVDC 2024CP0001	Research on Active Support Collaborative Control Method Based on New Hybrid DC Energy Storage Tie Liu, Xianchao Guo, Peng Chen, Qihui Huang 848393328@qq.com
HVDC 2024CP0003	Research on the Enhancement of Reliability for Fiber Optic Insulators Shaodong Li, Shenlin Zhao, Dongchao Liu, Liang Liu, Longfei Cui, Qiang Wang lisd@nrec.com
HVDC 2024CP0012	Economic Analysis of Large-scale Offshore Wind Power Integration Schemes Xinyao Shi, Wang Xiang, Jinyu Wen shixinyao0214@foxmail.com
HVDC 2024CP0042	The Partial Discharge Characteristics of Oil-paper Needle-plane Insulation Defects under Pulsating DC Voltage Jie Shen, Yuan Li, Shenglong Li, Zibin Li, Duiping Wu, Zhenghong Bao, Shuo Zhang, Hongwei Ding 1946285749@qq.com
HVDC 2024CP0053	Research and Application of Sunscreen and Heat Insulation Techonology in Power Systems under Extreme High-Temperature Environment Yuegui Ma, Zigang Shen, Qi Zhou 312257800@qq.com
HVDC 2024CP0064	Study on air gap discharge characteristics of fittings at the end of bushing in high altitude UHV converter station Shengcheng Dong, Guangxiuyuan Zhu, Ling Jiang, Yitao Zhang, Zhenghong Bao, Jun Li, Dezhi Sun, Peiming Li dscdzyx@163.com

HVDC 2024CP0087	Simulation Research on Circuit Power and Harmonics of DC Bias Injection Test Device Yaodong Zhang, Jinjiao Kong, Zhiqiang Feng, Yi Kan yellowzyd@163.com
HVDC 2024CP0113	Research on optimal configuration techonology of network energy storage based on scenario generation Yaxar·Turgun, Chenglong Lan 532130292@qq.com
HVDC 2024CP0131	Topology and Control Strategy of a High-Voltage and Large-Capacity DC Direct-Mounted Energy Storage Device Chenxuan Wang, Yangqing Dan, Hanlin Guo, Wenyao Ye, Zheren Zhang, Zheng Xu 709729252@qq.com
HVDC 2024CP0142	Multi-agent electricity energy substitutions planning considering uncertainty Linlin Wang, Xingong Cheng, Sirui Zhang, Fanpeng Bu, Weiliang Liu, Luhao Wang 1810457375@qq.com
HVDC 2024CP0051	Extraction method of partial discharge acoustic emission signal for solid insulated HVDC equipment Zhu Sirui 972525142@qq.com
HVDC 2024CP0163	Multi-objective resource optimization allocation of road-domain integrated energy system considering hydrogen energy storage Chengjun Gao, Ming Quan, Changhai Yang, Pengfei Gao, Jialin Zhang 2530894972@qq.com
HVDC 2024CP0165	Analysis of Large-Disturbance Stability off Full DC Power Generation System Based on Lyapunov Yang Xu, Fengting Li, Chunya Yin 1761406070@qq.com

HVDC 2024CP0166	A Cascaded H-Bridge Energy Storage Sub-module Test Platform and Control Method Jianhui Ji, Kunpeng Zha, Xuefen Jin, Lanfang Li, Dongjin She, Xiong Zhan jijianhui1980@sina.com
HVDC 2024CP0169	Capacity Optimization Configuration of Renewable Energy Stations Considering Electricity and Hydrogen Storage Complementarity Zhongping Yu, Haiming Song, Juan Ren, Gaohang Zhang, Junpeng Liang 2530894972@qq.com
HVDC 2024CP0170	Research on Wind Power Distribution Network Line Protection Method Based on Frequency Difference Junjie Lan, Jiechang Qiu, Maohua Yan, Yihui Luo, Ning Yu, Fangxu Lou, Ziteng Wang, Wei Liu, Chao Cao 13276603982@163.com
HVDC 2024CP0181	Analysis of the diffusion process of electric energy substitution techonology considering the differentiation of enterprises decision-making Jingxun T, Xingong C, Shengnan Z t2823317202@163.com
HVDC 2024CP0177	PMU-based Online Inertia Constant Identification of the Voltage Source with Inertia Support to the Grid Xiaoyu Deng, Xiaoxiao Qi, Xiaoyun Wang, Weihong Zao, Xing Ma xiaoyu_deng2023@163.com
HVDC 2024CP0107	Study on Geological Disaster Early Warning Analysis of Power Transmission Lines Based on Beidou Positioning Techonology Zhuang Wenbing, Zhang Xiaojun, Liu Wei dommo@126.com

HVDC 2024CP0108	Analysis and Research on Fault Characteristics of 110kV Cable Termination Based on FEM Zhang Xiaojun, Liu Hailin, Suzhou Wu, Zhou Shuqiang, Zhao Hongfeng 523389980@qq.com
HVDC 2024CP0168	Multi-source DC transmission lines icing prediction model based on adaptive weight feature Shuyang Ma, Yang Yang, Xinsheng Dong, Mingguan Zhao, Meng Li, Hongxia Wang 1346933535@qq.com
HVDC 2024CP0096	Wavelet coupling phase selection method for UHV transmission line fault Meng Li, Yang Yang, Xinsheng Dong, Mingguan Zhao, Hongxia Wang, Yang Hai 1106899155@qq.com
HVDC 2024CP0187	Primary frequency control strategy for wind turbine generators considering fatigue loads Dacheng Xu, Chunya Yin, Jiayang Zhou, Fengting Li, Jiangshan Liu 1844958188@qq.com
HVDC 2024CP0188	Analysis of the Impact of Relay Protection in AC/DC Hybrid Power Grid Based on PSCAD Qi Zhao, Jinlong Tan, Lu Zhang, Yinzhang Peng, Fei Shu, Long Chen 56365799@qq.com
HVDC 2024CP0192	A Method of Impedance Differential Protection for DG Grid-connected Line Qingxiu Du, Yiqing Liu, Di Yan, Yubin Wang, Yuanjian Wei, Qichao Xu duqingxiu2022@163.com
HVDC 2024CP0063	Analysis of Posterise interference prediction methods of electric drive system under different conditions Zhiwei Chen, Chen Yan, Jianben Liu, Shaoxin Meng, Xin Liu, Wenjing Chang, Qingtao Chen, Tingting Zha 1447401800@qq.com

HVDC 2024CP0152	Research on the key techonology of low voltage through of direct drive wind turbine Liang Shuchao, Zhai Baoyu, Wang Yunshan, Xu Zhi, Li Xinyang, Jiang Huan, Wu Haiyang 928295081@qq.com
HVDC 2024CP0182	Technical and Economic Analysis of Multiple Types of Wind Power Convergence and Transmission Methods in Typical Scenarios of Land and Sea Chengbin Chi, Yanan Wu, Jing Zhou, Lin Zhu, Qi Liu, Jun Yan jason_ccb@163.com
HVDC 2024CP0214	Design of Wind Power All-DC System based on the Turbine-side New Step-up Conversion Haiyang Han, Haiyun Wang, Zhanlong Li 2937513175@qq.com
HVDC 2024CP0132	Research And Simulation Of Micro-grid Scheduling In Industrial Park Jiangong Ma, Hanchao Ma, Qing Li 88487722@qq.com
HVDC 2024CP0217	Research on Hybrid HVDC Transmission System for Large-scale All-DC Offshore Wind and Solar Energies Qidi Zhong, Ming Li, Yajun Lu, Mingze Gang, Shaowei Wang, Jinping Sun wzgl40@163.com
HVDC 2024CP0221	Design and Analysis of a Field-Modulated Permanent-Magnet Direct-Drive Wind Power Generator with Postern-uniform Distribution of V-shaped Magnets Yujun Shi, Haifeng Lu, Jiwei Wang, Tiantian Du, Qingqing Liu, Wenlei Zhao shiyj@xju.edu.cn

HVDC 2024CP0229	Research on Frequency and Voltage Control Strategy for New Energy Collection and Delivery Based on Digital Twin Song Zhang, Guanghuai Li, Fan Zhang, Yu Zhang, Shiyu Ji, Yangyang Liu zsmaster@163.com
HVDC 2024CP0233	Reliability Evaluation and Optimization Design of DC Collection based Large-scale Offshore Wind Power Plants Tingting Cheng, Yijia Yuan, Lanlan Ji, Yuanzhen Li, Pengfei Su, Yali Liu hxqctt@126.com