IEEE DCTS 2nd 2025

IEEE

IEEE PES Power & Energy Society

中国南方电网 CHINA SOUTHERN POWER GRID 超高压输电公司

2025年IEEE直流技术与系统国际会议 暨IEEE PES直流电力系统技术委员会(中国)年会

The 2025 2nd IEEE International Conference on DC Technology and Systems IEEE PES China Satellite Technical Committee - DC Power System Annual Meeting

会议指南

PROGRAM

Nov. 29 - Nov. 30, 2025

Beijing • China

Conference APP

Live Photos

Guider:
IEEE
IEEE PES

Organizer:
IEEE Beijing Section
North China Electric Power University
IEEE PES China Satellite Technical Committee - DC Power System

Operator:
School of Electrical and Electronic Engineering, North China Electric Power University
State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources

Co-Operator:
China Southern Power Grid Co., Ltd. EHV Transmission Company

热烈欢迎各位嘉宾和代表

参加2025年IEEE直流技术与系统国际会议！

Welcome all guests and representatives to attend

The 2025 2nd IEEE International Conference

on DC Technology and System

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一、2025年IEEE直流技术与系统国际会议日程一览表

2025年IEEE直流技术与系统国际会议暨IEEE直流电力系统技术委员会(中国)年会 会议日程一览表

时间 Time / 地点 Place		北京龙城温德姆酒店大堂/Wyndham Beijing North Lobby								
11月28日	14:00-22:00	代表报到、领取资料/Registration								
时间 Time / 地点 Place		北京龙城温德姆酒店二楼北京厅 Beijing Hall, 2nd Floor, Wyndham		温德姆酒店一层重庆厅 Chongqing Room, 1st Floor, Wyndham	温德姆酒店二层昆桂厅 Kungui Room, 2nd Floor, Wyndham	华美达酒店一层恒山A厅 Hengshan A Room, 1st Floor, Ramada	华美达酒店一层恒山B厅 Hengshan B Room, 1st Floor, Ramada	华美达酒店一层嵩山B厅 Songshan B Room, 1st Floor, Ramada	华美达酒店二层太行山厅Taihangshan Room, 2nd Floor, Ramada	
11月29日	9:00-9:30	嘉宾致辞与论文表彰 Welcome Speech& Paper Commendation								
	9:30-12:00	特邀主旨报告 Keynote Speech								
	12:00-14:00	温德姆酒店一层博纳西餐厅 午餐（自助餐）/Lunch（Buffet）								
	14:00-17:00	特邀主旨报告 Keynote Speech								
	17:00-19:00	温德姆酒店一层博纳西餐厅 晚餐（自助餐）/Dinner（Buffet）								
	19:00-19:30			直流电力系统技术委员会（内部会议） IEEE PES China Satellite Technical Committee - DC Power System						
	19:30-20:30			直流输变电设备技术分委会（内部会议） DC Transmission and Transformation Equipment Subcommittee	直流输电控制保护技术分委会（内部会议） DC Transmission Control & Protection Subcommittee	直流配电网技术分委会（内部会议） DC Distribution Network Subcommittee	直流输配电系统仿真技术分委会（内部会议） DC Transmission and Distribution System Simulation Subcommittee	低压直流技术分委会（内部会议） Low Voltage DC Technical Subcommittee	直流系统规划与设计分委会（内部会议） DC System Planning & Design Subcommittee	
				分论坛一：直流输变电装备技术 Sub-forum 1: DC power transmission and transformation equipment technology	分论坛二：直流输电控制保护技术 Sub-forum 2: DC transmission control and protection technology	分论坛三：直流配电网技术（含低频输电技术） Sub-forum 3:DC distribution network technology (including low-frequency transmission technology)	分论坛四：直流输配电系统仿真技术 Sub-forum 4:DC transmission and distribution system simulation technology	分论坛五:低压直流技术 Sub-forum 5:Low Voltage DC Technology	分论坛六：直流系统规划与设计 Sub-forum 6:DC system planning and design	
11月30日	09:00-10:20			特邀专题报告 Invited Special Topic Report	特邀专题报告 Invited Special Topic Report	特邀专题报告 Invited Special Topic Report	特邀专题报告 Invited Special Topic Report	特邀专题报告 Invited Special Topic Report	特邀专题报告 Invited Special Topic Report	会议论文海报展示 Conference Paper Poster Session
	10:20-10:35	茶歇/Tea Break								
	10:35-12:00			特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	特邀专题报告及论文宣读 Invited Special Topic Report and Paper Presentation	
	12:00-14:00	温德姆酒店一层博纳西餐厅 午餐（自助餐）/Lunch（Buffet）								

会议报到/Meeting Registration

2025年11月28日星期五/Friday

北京龙城温德姆酒店大堂

Wyndham Beijing North Lobby

日期 Date	时段 Time	内容 Content	主持人 Host
11月28日	14:00-22:00	代表报到、领取资料 Representatives register and get information	/

主论坛/Main Forum

2025年11月29日星期六/Saturday

北京龙城温德姆酒店二楼北京厅

Beijing Hall, 2nd Floor, Wyndham Beijing North

日期 Date	时段 Time	内容 Content	主持人 Host
11月29日 上午 morning	09:00-09:30	主持人开场，嘉宾介绍 Host opening, Guest Introduction	王远游
		致辞 南方电网公司原总工程师，汪际峰 Welcome Speech , Jifeng Wang, Former Chief Engineer of China Southern Power Grid	
		致辞 华北电力大学副校长，房方 Welcome Speech, Fang Fang, Vice President of North China Electric Power University	
		致辞 IEEE PES候任主席，钟志勇 Welcome Speech, Chi-Yung Chung, IEEE PES President-elect	
		表彰2025年IEEE直流技术与系统国际会议论文奖 Recognizing the 2025 2nd IEEE International Conference on DC Technology and Systems Paper Award	
	09:30-09:50	**主旨报告：西班牙、葡萄牙“4.28”大停电事故分析及启示** Analysis and Enlightenment of the "4.28" Major Power Outage in Spain and Portugal **报 告 人：**中国电力科学研究院总工程师，汤涌	王远游
	09:50-10:10	**主旨报告：高比例新能源下直流多馈入电力系统安全稳定** Stability of HVDC Multi-infeed Power System with High Penetration of Renewable Energy **报 告 人：**国网经济技术研究院原副院长，马为民	
	10:10-10:40	合影及茶歇	

	10:40-11:00	**主旨报告：适用于大规模新能源基地送出的三种LCC-MMC串联型柔性直流输电结构** Three LCC-MMC Series-Connected HVDC Transmission Structures Suitable for Large-Scale Renewable Energy Base Power Delivery **报 告 人：**浙江大学二级教授，徐政	
	11:00-11:20	**主旨报告：远海风电经IGCT型电流源换流器送出系统研究** Research on the Integration of Offshore Wind Power into the Grid via IGCT-Based Current Source Converters **报 告 人：**华北电力大学教授，赵成勇	
	11:20-11:40	**主旨报告：南方电网量子电流传感器研发及应用** Development and Application of Quantum Current Sensors by China Southern Power Grid **报 告 人：**南方电网公司战略级高级技术专家，吕金壮	
	11:40-12:00	**主旨报告：基于大功率IGCT器件的高倍载模块化换向式变流器（MCC）研究与设备研制** Research and Equipment Development of High-Overload Modular Commutated Converter (MCC) Based on High-Power IGCT Devices **报 告 人：**荣信汇科电气股份有限公司副总裁，易荣	
	12:00-14:00	**午餐（自助餐）**	/
11月29日 下午	14:00-14:20	**主旨报告：构网型技术与新型电力系统-思考与实践** NR-ISGrid Technology and New Power Systems: Reflections and Practices **报 告 人：**南京南瑞继保电气有限公司研究院副院长，李海英	齐磊/周振宇
	14:20-14:40	**主旨报告：直流电网继电保护关键技术研究与展望** Research and Prospect of Key Technologies for Protection in DC Grids **报 告 人：**北京交通大学电气工程学院二级教授，和敬涵	
	14:40-15:00	**主旨报告：新型电力系统仿真技术实践与展望** The Simulation Technology and Application of New Power Systems **报 告 人：**南网科研院仿真所所长，涂亮	
	15:00-15:20	**主旨报告：适应大规模新能源送出的直流输电技术研究** Research on HVDC Transmission Technology for Large-Scale Renewable Energy Integration **报 告 人：**清华大学电机系长聘副教授，余占清	
	15:20-15:50	茶歇	
	15:50-16:10	**主旨报告：高压大功率IGBT关键技术及发展趋势** Key Technologies and Development Trends of High-voltage High-power IGBT Devices	

		报 告 人：南京南瑞半导体有限公司副总经理，周亮	
	16:10-16:30	**主旨报告：受控振荡式中高压直流开断技术研究** Research on Controlled-Oscillation-Based Medium- and High-Voltage DC Interruption Technology **报 告 人：**西安交通大学领军教授，吴翊	
	16:30-16:50	**主旨报告：低压直流技术发展与光储直柔产业化实践** Development of Low-Voltage DC Technology and Industrialization Practices of Photovoltaic-Storage-Direct Flexible Systems **报 告 人：**广东省能源互联网创新中心执行副主任，赵志刚	
	17:00-19:00	**晚餐（自助餐）**	/

IEEE PES直流电力系统技术委员会（中国）及其分委会内部会议
Internal Meeting of IEEE PES China Satellite Technical Committee - DC Power System and its Subcommittee

2025年11月29日星期六晚上/Saturday Night

日期 Date	时段 Time	内容 Content	主持人 Host
11月29日 晚上 night	19:00-19:30	IEEE PES直流电力系统技术委员会（中国）（IEEE PES China Satellite Technical Committee - DC Power System）年度工作会议（内部会议） 地点：温德姆酒店一层重庆厅 （Chongqing Room, 1st Floor, Wyndham）	张怿宁 秘书长
	19:45-20:45	直流输变电设备技术分委会（DC Transmission and Transformation Equipment Subcommittee）（内部会议） 地点：温德姆酒店一层重庆厅 （Chongqing Room, 1st Floor, Wyndham）	吕金壮
		直流输电控制保护技术分委会（DC Transmission Control & Protection Subcommittee）（内部会议） 地点：温德姆酒店二层昆桂厅 （Kungui Room, 2nd Floor, Wyndham）	陈潜
		直流配电网技术分委会（DC Distribution Network Subcommittee）（内部会议） 地点：华美达酒店一层恒山A厅 （Hengshan A Room, 1st Floor, Ramada）	行登江
		直流输配电系统仿真技术分委会（DC Transmission and Distribution System Simulation Subcommittee）（内部会议） 地点：华美达酒店一层恒山B厅 （Hengshan B Room, 1st Floor, Ramada）	陈钦磊
		低压直流技术分委会(Low Voltage DC Technical Subcommittee)会议（内部会议） 地点：华美达酒店一层嵩山B厅 （Songshan B Room, 1st Floor, Ramada）	孙凯祺
		直流系统规划与设计分委会会议(DC System Planning & Design Subcommittee）（内部会议） 地点：华美达酒店二层太行山厅 （Taihangshan Room, 2nd Floor, Ramada）	辛清明

专题研讨分论坛/Special Topic Discussion Forum

2025年11月30日星期日上午/Sunday Morning

日期 Date	时段 Time	内容 Content	主持人 Host
分论坛一:直流输变电装备技术 Sub-forum 1: DC Power Transmission and Transformation Equipment Technology 地点：温德姆酒店一层重庆厅（Chongqing Room, 1st Floor, Wyndham）			
11月30日 上午 morning	09:00-09:20	**主题报告：**基于光腔衰荡光谱原理的气体绝缘设备故障检测技术 Fault Detection Technology for Gas-Insulated Equipment Based on Cavity Ring-Down Spectroscopy **报 告 人：**南京航空航天大学，朱珉	吕金壮/ 李学宝
	09:20-09:40	**主题报告：**高压直流海底电缆在大规模海上风电并网中的研究应用 Research and Application of HVDC Submarine Cable in Large-Scale Offshore Wind Power Grid Connection **报 告 人：**中天科技海缆股份有限公司，张洪亮	
	09:40-10:00	**主题报告：**面向直流气体绝缘设备状态监测的多参量光纤传感技术 Multi-Parameter Optical Fiber Sensing Technology for Condition Monitoring of DC Gas-Insulated Equipment **报 告 人：**清华大学，秦炜淇	
	10:00-10:20	**主题报告：**环保型直流GIL气固绝缘设计基础理论与关键技术 Fundamental Theory and Key Technologies for the Gas-Solid Insulation Design of Environmentally Friendly DC GIL **报 告 人：**华北电力大学，陈庚	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**气体绝缘输电装备用特种陶瓷内绝缘支撑技术研究 Research on Special Ceramic Internal Insulation Support Technology for Gas-Insulated Transmission Equipment **报 告 人：**华北电力大学，杨霄	
	10:55-11:45	**论文宣读：**Research on Maintenance-Free Technology System for UHVDC Transmission Lines in High-Altitude Uninhabited Areas	
		论文宣读：Multidimensional Measurement Method for Surface Charge on Complex Contoured Surfaces of DC GIL Tri-Post Insulator	
		论文宣读：Localization Error Analysis of Internal Breakdown Sensing in UHVDC GIL based on ϕ-OTDR	
		论文宣读：Design and Key Technology Research of Intelligent Inspection System for Ultra-High Voltage Converter Stations	
		论文宣读：Evolution mechanism of surface discharge characteristics of power device insulation packaging	

分论坛二:直流输电控制保护技术 Sub-forum 2: DC Transmission Control and Protection Technology 地点：温德姆酒店二层昆桂厅（Kungui Room, 2nd Floor, Wyndham）			
11月30日 上午 morning	09:00-09:20	**主题报告：**柔性直流技术在受端负荷中心电网的应用及典型控制策略研究 Application and Typical Control Strategies of Flexible DC Technology in Receiving-End Load Center Grids **报 告 人：**南网科研院，刘涛	陈潜/ 李根
	09:20-09:40	**主题报告：**大容量柔性直流工程非工频劣化问题与抑制 Non-Power-Frequency Deterioration Issues and Suppression in Large-Capacity Flexible DC Projects **报 告 人：**国网经研院，王莹鑫	
	09:40-10:00	**主题报告：**现货市场对直流主设备运行影响分析及管控 Impact Analysis of Electricity Spot Market on HVDC Main Equipment Operation and Corresponding Control Measures **报 告 人：**南网超高压公司，武霁阳	
	10:00-10:20	**主题报告：**直流输电线路行波测距技术优化措施研究 Techniques for Optimizing Travelling Wave Fault Location on HVDC Transmission Lines **报 告 人：**科汇电气公司，李录照	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**光伏集群柔直送出系统构网型控制技术研究 Research on Grid-forming Control Technology for PV Cluster Transmission via Flexible HVDC Transmission Systems **报 告 人：**南网超高压公司，刘航	
	10:55-11:15	**主题报告：**面向高阻故障与强噪声干扰的柔性直流线路新型保护原理 Novel Protection Principles for Flexible DC Lines Oriented to High-Resistance Faults and Strong Noise Interference **报 告 人：**北京交通大学，张大海	
	11:15-12:05	**论文宣读：**Dual-Stage feature optimization: fault classification combining signal decomposition and LightGBM	
		论文宣读：Fault Ride-through Strategy for DC Line Fault of HVDC Based on Reactive Current Control	
		论文宣读：Noise-Resilient Modulation Recognition for Digitalized Power Grids Using SSA and TCN	
		论文宣读：Ground Fault and Protection of VSC-HVDC System Sent by Long Submarine Cable	
		论文宣读：A Multi-port Converter Hybrid MMC for Selective Fault Clearance in DC Grid	

分论坛三:直流配电网技术(含低频输电技术) Sub-forum 3: DC Power Distribution Network Technology (including Low-Frequency Transmission Technology) 地点：华美达酒店一层恒山A厅（Hengshan A Room, 1st Floor, Ramada）			
11月30日 上午 morning	09:00-09:20	**主题报告：**面向交直流混联电网多源互济的直流输电协调控制技术 Coordinated Control Technology for DC Transmission in AC/DC Hybrid Power Grids with Multi-Source Interaction **报 告 人：**东南大学，李周	行登江/ 刘灏
	09:20-09:40	**主题报告：**基于碳化硅器件串联的高功率密度中压换流技术 High-Power-Density Medium-Voltage Converters Using Series-Connected SiC Power Devices **报 告 人：**浙江大学，邵帅	
	09:40-10:00	**主题报告：**高可靠高承载分布式光充资源的柔性配电技术及应用 Flexible Distribution Technology and Its Application for Highly Reliable and High-Capacity Distributed PV-Charging Resources **报 告 人：**国网山东省电力公司，王峰	
	10:00-10:20	**主题报告：**高压直流变压器分类、应用和拓扑研究 High Voltage DC Transformer Classification, Applications, and Topologies Study **报 告 人：**西安交通大学，张笑天	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**非隔离型柔性互联配电网共模分量抑制的理论与方法 Theory and Method of Common Mode Component Suppression in Non-isolated Flexible Interconnected Distribution Networks **报 告 人：**国网江苏省电力有限公司，葛雪峰	
	10:55-11:15	**主题报告：**超大电流电力开断技术研究进展 Research Progress on Ultra-High Current Breaking Technology **报 告 人：**西安交通大学，刁兆炜	
	11:15-12:05	**论文宣读：**Micro Harmonic Energy Harvesting Chips for DC Power Grids	
		论文宣读：A Closed-Loop Detection Method for MEMS Resonant Electric Field Sensors in AC Electric Fields	
		论文宣读：A Voltage Sag Localization Method Based on Disturbance Reactive Power Derived from the Clarke Transform	
		论文宣读：A Lightweight Evaluation Method for Harmonic Monitoring Indicator Based on High-order Statistics	
		论文宣读：Coordinated Operation Method of Hybrid Energy Storages and Renewable Energy Sources	

分论坛四:直流输配电系统仿真技术 Sub-forum 4: DC Transmission and Distribution System Simulation Technology 地点：华美达酒店一层恒山B厅（Hengshan B Room, 1st Floor, Ramada）			
11月30日 上午 morning	09:00-09:20	**主题报告：**电磁暂态仿真中的换流器通用化建模与高效仿真方法 Generic Modeling and Efficient Simulation Method for Converters in Electromagnetic Transient Simulation **报 告 人：**华北电力大学，姚蜀军	郭海平/ 许建中
	09:20-09:40	**主题报告：**面向双馈电机（DFIG）风力发电系统的低电压穿越能力提升 Enhancement of Low-Voltage-Ride-Through Capability for DFIG Wind Energy Systems **报 告 人：**IEEE高级会员，石祥花	
	09:40-10:00	**主题报告：**交直流微电网亚微秒级电磁暂态实时仿真方法 Real-time electromagnetic transient simulation method for AC/DC microgrids at sub-microsecond level **报 告 人：**上海交通大学，徐晋	
	10:00-10:20	**主题报告：**低压直流配用电系统关键技术及应用 Key Technologies and Applications of LVDC Power Distribution and Utilization Systems **报 告 人：**上海大阈信息技术有限公司，侯院军	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**新能源并网仿真建模技术及应用 New Energy Grid-Connection Simulation Modeling Technology and Its Applications **报 告 人：**南方电网公司，罗超	
	10:55-11:35	**论文宣读：**Analysis of the Impact of MMC Valve Group Charging at the Inverter Side on LCC Station in Hybrid MMC-LCC Multi-Terminal HVDC Systems	
		论文宣读：Identification of Grid Partitions and Key Transmission Lines Based on Leiden Clustering and Multi-Dimensional Evaluation	
		论文宣读：Method for Measuring HVDC Transmission Line Parameters under High Induction Voltage	
		论文宣读：Research on Reactive Power Support Technology Based on Controllable Line Commutated Converter and Its Impact on Power Grid Stability	

分论坛五:低压直流技术 Sub-forum 5: Low-Voltage Direct-Current (LVDC) Technology 地点：华美达酒店一层嵩山B厅（Songshan B Room, 1st Floor, Ramada）			
11月30日 上午 morning	09:00-09:20	**主题报告：**新型配电系统源荷谐波建模及动态特征分析 Harmonic Modeling and Dynamic Characteristics Analysis of Source and Load in New Distribution Systems **报 告 人：**山东大学，李亚辉	孙凯祺/ 王健
	09:20-09:40	**主题报告：**新型低压配电系统谐波建模评估与预测 Harmonic Modeling, Evaluation and Prediction for New Low-voltage Power Distribution System **报 告 人：**青岛大学，谢香敏	
	09:40-10:00	**主题报告：**城市电网嵌入式直流互联系统运行模式与控制策略研究 Research on Operation Modes and Control Strategies of Embedded DC Interconnection Systems in Urban Power Grids **报 告 人：**山东大学，孙凯祺	
	10:00-10:20	**主题报告：**电力电子装备接入系统安全稳定分析 Security and Stability Analysis of Power Electronic Equipment Grid-Connected Systems **报 告 人：**中国电力科学研究院有限公司，尹睿	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**支撑新型配电系统构建的交直流配电网、微电网多层级立体组网技术、装备与应用 Hierarchical Networking Technologies, Equipment, and Applications of AC/DC Distribution Network and Microgrids for Constructing New-Type Distribution Systems **报 告 人：**国网山东省电力公司，刘洋	
	10:55-11:45	**论文宣读：**Physics-Informed Graph Neural Network for Photovoltaic Power Forecasting in Low-Voltage DC Systems	
		论文宣读：Three-Phase Imbalance Mitigation Strategy for Distribution Station Areas Based on Dynamic Partitioning and Bi-Level Optimization	
		论文宣读：Design and Simulation of a Full-Bridge MMC-Based DC De-Icing Device	
		论文宣读：Research on a Composite DC Circuit Breaker for Urban Rail Transit Traction Systems	
		论文宣读：Intelligent Monitoring and Mechanical Analysis System for Transmission Towers Based on Multi-Source Perception and Digital Modeling	

分论坛六:直流系统规划与设计 Sub-forum 6: DC System Planning and Design 地点：华美达酒店二层太行山厅（Taihangshan Room, 2nd Floor, Ramada）			
11月30日 上午 morning	09:00-09:20	**主题报告：**大规模新能源馈入电网直流主动支撑和直流大母线技术 Large-scale renewable energy grid integration with active DC support and high-voltage DC bus technology **报 告 人：**浙江大学电气学院，黄莹	辛清明/ 刘自发
	09:20-09:40	**主题报告：**大规模海上风电柔性直流送出技术及挑战 VSC-HVDC Transmission Technology and Challenges for Large-scale Offshore Wind Power **报 告 人：**广东省电力设计研究院有限公司，王建武	
	09:40-10:00	**主题报告：**基于主动换相型电流源换流器远海风电送出系统的调控策略 Study on Modulation and Control Strategies for Offshore Wind Power Transmission System Based on Active Commutated Current Source Converters **报 告 人：**华北电力大学，熊小玲	
	10:00-10:20	**主题报告：**含SiC器件的模块化多电平换流器及其调控策略 Research on the Modular Multilevel Converter with SiC Devices and Its Modulation Scheme **报 告 人：**华中科技大学，殷天翔	
	10:20-10:35	**茶 歇 / Tea Break**	
	10:35-10:55	**主题报告：**海上风电柔性直流构网送出系统研究 Research on Grid-Forming VSC-HVDC System for Offshore Wind Farm **报 告 人：**西安西电电力系统有限公司，宋志顺	
	10:55-11:45	**论文宣读：**Magnetic Field Distribution and Safety Protection Strategy of Bridge Arm Reactors in VSC-HVDC Converter Stations	
		论文宣读：Risk Analysis and Optimization Measures for Overpressure Protection of Valve Groups Under Non-Standard Operating Conditions in Hybrid Multi-Terminal UHVDC Project	
		论文宣读：A Novel Initialization Strategy for the control system of VSC-HVDC	
		论文宣读：Simulation and Experimental Study on the Diffusion Characteristics of Characteristic Gases Inside Oil-Filled Submarine Cables	
		论文宣读：Hot-line Replacement and Crimping of Transmission Line Strain Clamps Using Coordinated Advanced Equipment	

二、大会组织架构

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汪际峰 南方电网公司原总工程师

（二）大会主席

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祝 谦 南网超高压公司副总经理

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王远游 南网超高压公司总经理助理

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国建宝 南网超高压公司电力科研院副总经理

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赵成勇 华北电力大学教授

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（七）论文集编委员会主席

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许建中　华北电力大学电气与电子工程学院教授

三、主旨报告嘉宾

汤涌，教授级高级工程师、博士生导师，中国电力科学研究院总工程师，国务院政府特殊津贴获得者，首批新世纪“百千万人才工程”国家级人选，中国电力科学技术杰出贡献奖获得者，首批国家电网公司十大科技领军人才。现任怀柔国家实验室特聘专家、《中国电机工程学报》主编、《电网技术》副主编。1982 年进入中国电力科学研究院，历任电力系统研究所所长、院总工程师、电网安全与节能国家重点实验室主任、电网安全全国重点实验室主任等职。他始终聚焦大电网安全稳定运行这一国家和行业的重大需求，历经近 40 年潜心攻关，先后在电力系统仿真建模和软件开发、互联电网安全稳定运行理论、互联电网分析与控制技术等领域，取得了从基础理论到工程应用的一系列原创性、开拓性成果。以第 1 完成人获国家科学技术进步一等奖 1 项、省部级科学技术一等奖 5 项、中国专利优秀奖 2 项，专著 7 部。发表 SCI/EI 论文 220 余篇、授权发明专利 70 余项，主持编写国标/行标 10 余项。

Yong Tang, a professor-level senior engineer and doctoral supervisor, is a recipient of the Special Government Allowance from the State Council. He is also one of the first batch of national-level candidates selected for the "Hundred, Thousand, and Ten Thousand Talent Project" in the new century, a recipient of the Outstanding Contribution Award for Electric Power Science and Technology in China, and one of the first ten leading talents in science and technology of the State Grid Corporation of China. Currently, he serves as a specially-appointed expert at the Huairou National Laboratory, the chief editor of "Proceedings of the CSEE (China Electric Power Society)", and the deputy editor of "Power Grid Technology".

In 1982, he joined the China Electric Power Research Institute and served successively as Director of the Power System Research Institute, Chief Engineer of the Institute, Director of the State Key Laboratory of Power Grid Safety and Energy Conservation, and Director of the National Key Laboratory of Power Grid Safety. He has always focused on the major national and industrial demand for the safe and stable operation of large power grids. After nearly 40 years of dedicated research, he has achieved a series of original and pioneering results ranging from basic theory to engineering application in the fields of power system simulation modeling and software development, theory of safe and stable operation of interconnected power grids, and analysis and control technology of interconnected power grids.

As the first contributor, I have won 1 first prize of National Science and Technology Progress Award, 5 first prizes of provincial and ministerial science and technology awards, 2 China Patent Excellence Awards, and authored 7 monographs. I have published over 220 SCI/EI papers, obtained over 70 authorized invention patents, and presided over the compilation of over 10 national/industry standards.

马为民，教授级高级工程师，从事直流输电的技术研究和管理工作，国网经济技术研究院原副院长。享受国务院政府特殊津贴专家，国家百千万人才，国家电网公司第一批十大科技领军人才，公司科技攻关团队带头人，国内电力电子及直流输电多个标准化技术委员会委员，IEC 多个技术委员会工作组召集人。自 1996 年至今，参与了国家电网公司全部直流工程的建设，是多项重大直流工程系统设计的技术总负责人。

Weimin Ma, Professor level senior engineer. Engaged in HVDC transmission technology research and management. Ma Weimin is currently the vice general manager of State Grid Economics and Technology Research Institute Co. He is an expert enjoying the State Council's special government subsidy, a national talent of one million talents, one of the first ten scientific and technological leaders of State Grid Corporation, and the leader of the company's scientific and technological research team. He is also a member of several standardization technical committees of power electronics and DC transmission in China, and the convenor of several technical committee working groups of IEC. Since 1996, he has participated in the construction of all DC projects of the State Grid Corporation, and is the technical chief of system design of many major DC projects.

徐政，电力系统专家，浙江大学二级教授，IEEE Fellow，电力科学技术杰出贡献奖获得者，全球终身科学影响力前2%顶尖科学家。在直流输电系统原理、成套设计和交直流电力系统规划等方面取得了一系列创新成果，产生了巨大的经济效益和社会效益，在国内外具有重要的学术影响力，为推动直流输电事业的发展作出重大贡献。于1983、1986和1993年分别在浙江大学电机系获学士、硕士和博士学位。出版专著5部、译著12部，荣获机械工业出版社建社60周年“最具影响力作者”（2012）和建社70周年“百佳作译者”（2022）称号；2012年出版的专著《柔性直流输电系统》在2012年以来中国出版的电工技术类图书中引用数排名第一；2025年出版的专著《基于子模块级联型换流器的柔性输电系统》曾荣登京东“电工电气类图书销量排行榜”第一名。发表论文600余篇，其中单篇最高SCI引用数超过1000次。2011年获国家科技进步一等奖1项，1997年获国家自然科学三等奖1项。已培养全日制研究生136人，其中获博士学位56人、硕士学位80人。 担任直流输电技术全国重点实验室学术委员会委员、中国南方电网公司专家委员会委员。

Zheng Xu is an expert in power systems, born in September 1962 in Haining, Zhejiang. He is a professor at Zhejiang University, an IEEE Fellow, recipient of the Outstanding Contribution Award in Electric Power Science and Technology, and ranked among the top 30,000 scientists in the 2025 Global Career-long Impact rankings. His innovative work in HVDC transmission system principles, integration design, and AC/DC power system planning has generated significant economic and social benefits. With major academic influence both domestically and internationally, he has made substantial contributions to advancing DC transmission technology. He earned his Bachelor's, Master's, and Doctoral degrees from the Department of Electrical Engineering at Zhejiang University in 1983, 1986, and 1993, respectively. He has published 5 monographs and translated 12 books, earning recognition as "Most Influential Author" for China Machine Press's 60th anniversary (2012) and "Top 100 Authors and Translators" for its 70th anniversary (2022). His 2012 monograph " Voltage Source Converter Based HVDC Power Transmission Systems " ranks first in citations among electrical engineering books published in China since 2012. His 2025 monograph "Flexible Power Transmission Systems Based on Cascaded Submodule Converters" reached number one on JD.com's "Electrical Engineering Books Sales Chart". He has published over 600 papers, with one paper receiving more than 1,000 SCI citations. He received the First-Class Prize of the National Science and Technology Progress Award in 2011 and the Third-Class Prize of the National Natural Science Award in 1997. He has supervised 136 full-time graduate students—56 doctoral and 80 master's degree recipients. He serves on the Academic Committee of the National Key Laboratory of HVDC Transmission Technology and the Expert Committee of China Southern Power Grid Company Limited.

赵成勇，教授、博导、所长，全国重点实验室直流输电方向负责人，大学学科带头人。中国电机工程学会直流输电与电力电子专委会委员。加拿大曼尼托巴大学兼职教授（2015.7-2018.6）。主持国家863计划课题、国家自然基金联合基金重点项目、国家重点研发计划课题等纵向项目10项，出版直流输电专著八部，获教育部发明二等奖等省部级奖励8项。

Chengyong Zhao, a Professor and Doctoral Supervisor, serves as the Director and Head of the HVDC Transmission Direction at a National Key Laboratory, as well as a disciplinary leader at the university. He is a member of the HVDC Transmission and Power Electronics Committee of the Chinese Society for Electrical Engineering and previously held the position of Adjunct Professor at the University of Manitoba, Canada from July 2015 to June 2018. He has presided over 10 national-level vertical projects, including topics under the National 863 Program, key projects of the National Natural Science Foundation Union Fund, and projects within the National Key R&D Program. Additionally, he has published eight monographs on HVDC transmission and has received eight provincial and ministerial-level awards, including the Second Prize for Invention from the Ministry of Education.

吕金壮，教授级高工，南方电网公司战略级高级技术专家，国务院特殊津贴专家，国家科技进步特等奖获得者，国家卓越工程师团队成员。长期从事特高压直流工程建设、运行及电网科研工作。重点推动特高压直流输电领域主设备与绿色低碳绝缘材料关键技术研发、先进智能技术在电网领域的研发与集成应用。担任 IEEE PES 直流输变电设备分委会副主席，中国电机工程学会直流输电与电力电子专委会委员、全国高压直流输电设备标准化技术委员会委员等。承担及主要完成国家级重大项目 6 项、重大工程 8 项，获省部级科技进步奖励十余项，授权发明专利 33 项。

Dr. Jinzhuang Lv, Professor-Level Senior Engineer, Strategic-Level Senior Technical Expert at China Southern Power Grid, Recipient of the Special Government Allowance from the State Council, Winner of the National Special Prize for Scientific and Technological Progress, and Core Member of the National Outstanding Engineer Team. He has long been engaged in the construction, operation, and research of Ultra-High Voltage Direct Current (UHVDC) projects, focusing on advancing key technologies for UHVDC transmission systems, including core equipment and green low-carbon insulation materials, as well as the integration of advanced smart technologies into grid applications. He holds several prestigious professional roles, including Vice Chair of the IEEE PES Subcommittee on DC Transmission and Transformation Equipment; Member of the DC Transmission and Power Electronics Committee of the Chinese Society for Electrical Engineering; and Member of the National Technical Committee for Standardization of High-Voltage DC Transmission Equipment. He has led or contributed to 6 national-level major research projects and 8 landmark engineering programs, receiving over 10 provincial/ministerial Science and Technology Progress Awards, and holds 33 authorized invention patents.

易荣，荣信汇科电气股份有限公司副总裁。主要从事大功率电力电子器件应用及直流输配电系统等方向研究和产品开发工作。主持研制成功多个具有国际领先水平的柔性直流输电换流阀首台（套）重大技术装备。IEEE PES直流电力系统技术委员会直流输变电设备分委会常务理事，全国高压直流输电设备标准化技术委员会（SAC/TC333）委员、全国电力电子系统和设备标准化技术委员会输配电系统电力电子技术分技术委员会（SAC/TC60/SC2)委员。

Rong Yi, Vice President of Rongxin Huiko Electric Co., Ltd. Specializing in research and product development of high-power power electronic device applications and DC power transmission/distribution systems. Led the successful development of multiple first-of-its-kind VSC HVDC valves with internationally leading technical performance. IEEE PES DC Power System Technical Committee: Standing Director of DC Transmission Equipment Subcommittee. SAC/TC333 (National High-Voltage DC Transmission Equipment Standardization Technical Committee): Member. SAC/TC60/SC2 (National Power Electronic Systems and Equipment Standardization Technical Committee, Subcommittee for Power Electronics in Transmission/Distribution Systems): Member

李海英，南京南瑞继保电气有限公司研究院副院长，长期从事超/特高压直流输电、柔性直流输电和高端电力电子装备的研发工作。参与世界首个五端柔直示范工程，首个±500kV/3000MW 高压大容量柔性直流电网工程以及首个±800kV/5000MW 特高压混合直流工程等的装备研制。

Haiying Li, Vice President of the Research Institute, Nanjing NR Electric Co., Ltd. He has long been engaged in the R&D of ultra/extra-high voltage direct current (UHVDC/EHVDC) transmission, voltage source converter-based high-voltage direct current (VSC-HVDC) transmission, and high-end power electronic equipment. He participated in the equipment development of several landmark projects, including the world's first five-terminal VSC-HVDC demonstration project, the first ±500kV/3000MW high-voltage and large-capacity VSC-HVDC grid project, and the first ±800kV/5000MW extra-high voltage hybrid direct current (HVDC) project.

和敬涵，北京交通大学电气工程学院二级教授，IEEE Fellow，国务院政府津贴专家，电力科技杰出贡献奖获得者，教育部高等学校电气类教学指导委员会委员。长期从事电力系统保护与控制教学与科研，近年主持承担国家重点研发计划课题、国家自然基金重点项目等近20项，共发表SCI/EI论文200余篇，获国家教学成果二等奖一项，省部级科学技术奖一等奖2项，出版教材专著5部。

Jinghan He，professor at the School of Electrical Engineering, Beijing Jiaotong University, IEEE Fellow, a government subsidy expert from the State Council, recipient of the Outstanding Contribution Award for Power Technology, and a member of the Teaching Guidance Committee for Electrical Engineering in Higher Education Institutions under the Ministry of Education. She has been engaged in teaching and research on power system protection and control for a long time. In recent years, she has undertaken nearly 20 national key research and development projects and key projects of the National Natural Science Foundation. She has published more than 200 SCI/EI papers and won one second prize for national teaching achievements and two first prizes for provincial and ministerial-level scientific and technological awards. Published 5 books etc.

涂亮，教授级高级工程师，南方电网科学研究院仿真所所长，CIGRE电力系统运行控制专委会委员，曾任中国电力行业知识管理技术标准化委员会秘书长，长期从事电力系统稳定分析与控制、新能源并网运行与控制等研究，重点参与国家“863”科技支撑计划课题1项、国家重点研发计划项目2项，获省部级奖励10余项。

Liang Tu, Professor-level Senior Engineer, Director of the Power System Simulation and Control Technology Department of SEPRI, Member of the CIGRE CNC SC C2 on Power System Operation and Control, Secretary-General of the Knowledge Management Technology Standardization Committee of China's Electric Power Industry.

He has long been engaged in research on power system stability analysis and control, new energy grid-connected operation and control, etc. He has played a key role in 1 national "863" Program project, 2 National Key R&D Program projects, and won more than 10 provincial and ministerial-level awards.

余占清，博士，清华大学电机系长聘副教授，博士生导师，入选国家级高层次人才计划，长期从事直流电网关键装备、大容量功率半导体器件及直流系统电磁暂态研究，主持国家自然科学基金优秀青年科学基金项目、国家重点研发计划课题等多项国家级科研项目。成果在多个国家重大工程应用。发表SCI 论文 190 余篇，获授权发明专利 120 余项，合作出版中英文专著共 5 本，牵头及参与制定标准 10 余项。担任 IET ACDC、IEEE DCTS 等国际会议 TPC 主席，IET High Voltage 等期刊副编辑或特邀编辑。获国家技术发明奖二等奖 1 项，获省部与学会一等奖 10 项；获 IET E&T 电力能源创新奖，IEEE APEMC 青年科学家奖等。

Zhanqing Yu, Ph.D., is a tenured associate professor and doctoral supervisor in the Department of Electrical Engineering at Tsinghua University. He has been selected for national-level high-level talent programs and has long been engaged in research on key equipment for DC grids, high-power semiconductor devices, and electromagnetic transients in DC systems. He has led several national-level research projects, including the National Natural Science Foundation of China (NSFC) Excellent Young Scientists Fund and projects under the National Key R&D Program of China. Research results were successfully applied in the several major project. He has published over 190 SCI-indexed papers, obtained more than 120 authorized invention patents, co-authored five Chinese and English academic books, and led or participated in the formulation of over 10 standards. He has served as the Technical Program Committee (TPC) Chair for international conferences such as IET ACDC and IEEE DCTS, and as an associate editor or guest editor for journals including IET High Voltage. His awards include the Second Prize of the 2023 National Technological Invention Award, and 10 provincial/ministerial and society-level first prizes. He has also received the IET E&T Power Energy Innovation Award, the IEEE APEMC Young Scientist Award.

周亮，正高级工程师，现任南京南瑞半导体有限公司副总经理，2023年度北京市“昌聚工程”青年人才，2024年南京市中青年拔尖人才。作为核心骨干和执行负责人，先后参与国内首套自主研发+800kV特高压直流换流阀、世界首套可控换相CLCC直流换流阀、自主4500V/3000A、5000A等压接式IGBT器件等核心装备的研发及工程应用，累计获得省部行业级科技进步奖8项。

Liang Zhou, a Professor-level Senior Engineer and currently serves as the Deputy General Manager of Nanjing NARI Semiconductor Co., Ltd. He has been recognized as a 2023 Youth Talent in the "Changju Project" of Beijing, and as a 2024 Nanjing Outstanding Young and Middle-Aged Talented Expert.As a core team member and executive lead, he has participated in the research, development, and engineering application of several key projects, including: the first self developed ±800kV UHVDC converter valve of China. The first CLCC converter valve in the world. Domestically developed 4500V/3000A and 5000A press-pack IGBT devices. To date, he has received 8 provincial/ministerial/industry-level Science and Technology Progress Awards.

吴翊，西安交通大学领军教授/博导。研究方向为电力电子与直流开断技术；入选国家杰青、教育部新世纪人才计划、陕西省科技创新领军计划；主持了国家自然科学联合基金重点项目、国家重点研发计划课题等国家级项目 10 多项；担任国际“电流零点俱乐部成员”委员、“气体放电及其应用”国际学术组织科学委员会委员、陕西省高电压大电流测试技术及装备工程实验室副主任；出版专著 2 部；研究成果获国家技术发明二等奖 1 项、教育部自然科学一等奖 1 项、陕西省技术发明一等奖 2 项。

Yi Wu, born in 1975, is a Leading Professor at Xi’an Jiaotong University. His research interests focus on power electronics and DC interruption technology. He has been selected for the National Science Fund for Distinguished Young Scholars, the Program for New Century Excellent Talents in University, and the Shaanxi Provincial Leading Talents in Scientific and Technological Innovation Program.

Prof. Wu has led more than ten national research projects, including key projects of the NSFC Joint Fund and the National Key R&D Program. He is a member of the international Current Zero Club, a member of the Gas Discharge and Its Applications Committee, and the Deputy Director of the Shaanxi Laboratory for High-Voltage and High-Current Testing Technology and Equipment. He has published two monographs. His research achievements have been recognized with numerous awards, including Second Class of the State Technological Innovation Award, First Prize of the Natural Science Award from the Ministry of Education, and two First Prizes of the Shaanxi Provincial Technological Invention Award.

赵志刚，广东省能源互联网创新中心执行副主任，正高级工程师，中国建筑节能协会光储直柔专委会副主任委员，IEEE PES(中国)低压直流技术分委会副主席，长期致力于零碳直流技术研发及产业化工作。

Zhigang Zhao, Executive Deputy Director of the Guangdong Energy Internet Innovation Center, Senior Engineer, Deputy Director of the Photovoltaic-Storage-Direct Flexible Committee of the China Association of Building Energy Efficiency, Vice Chairman of the IEEE PES (China) Low Voltage Direct Current Technology Subcommittee, has long been committed to the research, development, and industrialization of zero-carbon direct current technology.

四、专题报告专家

分论坛一：直流输变电装备技术

朱珉，博士，南京航空航天大学硕士生导师，江苏省真空学会等离子体专委会副秘书长。长期从事高压电气设备在线监测与故障诊断、低温等离子体技术及其空天应用研究。主持国防 173 基础加强计划课题、国家重点研发计划子课题、江苏省青年科学基金、航空科学基金、中国博士后科学基金面上项目等 10 余项国家及省部级科研项目。在 Plasma Science and Technology、Journal of Physics D: Applied Physics、Chemical Engineering Journal、Applied Energy 等国际权威期刊发表学术论文 20 余篇，授权发明专利专利 10 余项，参与编制 IEEE 标准、国家标准、行业标准 10 余项。

Min Zhu, Ph.D., Master's Supervisor at Nanjing University of Aeronautics and Astronautics, Deputy Secretary-General of the Plasma Professional Committee of the Jiangsu Vacuum Society. Long engaged in research on online monitoring and fault diagnosis of high-voltage electrical equipment, low-temperature plasma technology and its aerospace applications. Has presided over more than 10 national and provincial/ministerial level research projects, including projects under the National Defense 173 Basic Strengthening Plan, sub-projects of the National Key R&D Program, the Jiangsu Provincial Youth Science Fund, the Aeronautical Science Foundation, and the China Postdoctoral Science Foundation General Program. Published over 20 academic papers in internationally authoritative journals such as Plasma Science and Technology, Journal of Physics D: Applied Physics, Chemical Engineering Journal, and Applied Energy. Granted over 10 invention patents. Participated in the formulation of more than 10 IEEE standards, national standards, and industry standards.

张洪亮，男，高级工程师，上海交通大学博士，现为中天科技海缆股份有限公司总工程师，江苏省海洋能源与信息传输重点实验室副主任。

学术兼职：IEEE PES 可再生能源系统集成技术委员会（中国）海上风电装备分技术委员会常务理事、全国高电压试验技术和绝缘配合标准化技术委员会委员、EPTC柔性直流专委会委员、江苏电力行业协会理事、江苏

省产业教授、英国工程技术学会（IET）特许工程师，主要从事交直流海底电缆核心材料选型、结构设计、制造工艺及试验验证方法研究。

Hongliang Zhang, male (1987-), Senior Engineer, Ph.D. Chief Engineer of Zhongtian Submarine Cable Co., Ltd. and the deputy director of Jiangsu Key Laboratory of Marine Energy and Information Transmission.

Academic Affiliations: Standing Director of the Offshore Wind Power Equipment Subcommittee of the IEEE PES Renewable Energy Systems Integration Technical Committee (China), Member of the National High Voltage Test Technology and Insulation Coordination Standardization Technical Committee, Member of the EPTC Flexible DC Special Committee, Director of Jiangsu Electric Power Industry Association, Jiangsu Province Industry Professor, Chartered Engineer of the Institution of Engineering and Technology (IET), UK. His main research areas include the selection of core materials, structural design, manufacturing processes, and test verification methods for AC and DC submarine cables.

杨霄，华北电力大学，副教授，长期从事先进高压输电装备绝缘结构设计、高性能电介质材料研发及在线监测与智能诊断研究，主持国家科技重大专项课题 1 项，国家自然科学基金 1 项，承担国家重点研发计划子课题 3 项，参与制定国家标准 3 项，在 Nano Letter, Advanced Material 等领域顶级期刊发表 SCI 论文 50 余篇，授权国家发明专利 20 余项，授权国际 PCT 专利 4 项。

Xiao Yang, Associate Professor, North China Electric Power University. Long engaged in research on insulation structure design for advanced high-voltage transmission equipment, development of high-performance dielectric materials, online monitoring and intelligent diagnosis. Presided over 1 National Science and Technology Major Project, 1 National Natural Science Foundation project, undertook 3 sub-projects of the National Key R&D Program. Participated in the formulation of 3 national standards. Published over 50 SCI papers in top-tier journals in the field such as Nano Letters and Advanced Materials. Granted over 20 national invention patents and 4 international PCT patents.

秦炜淇，清华大学博士后研究员，2023 年毕业于华北电力大学，研究方向为电力设备状态监测与先进光纤传感技术。作为骨干参与国家科技重大专项等多项课题，主持国家重点实验室开放课题 1 项，入选博士后国资计划和清华大学“水木学者”计划。累计发表 SCI/EI 论文 40 余篇，授权发明专利 9 项，获中国电工技术学会科技进步奖一等奖、二等奖及多项国内外会议优秀论文和优秀报告奖，担任《高电压技术》特约编辑及 IEEE PES 电力设备数字孪生工作组成员。

Weiqi Qin, Postdoctoral Researcher at Tsinghua University, graduated from North China Electric Power University in 2023. Research focus: condition monitoring of power equipment and advanced optical fiber sensing technology. As a key participant, involved in multiple projects including the National Science and Technology Major Project. Presided over 1 Open Fund project of the State Key Laboratory. Selected for the Postdoctoral International Exchange Program and Tsinghua University's "Shuimu Scholar" Program. Published over 40 SCI/EI indexed papers, granted 9 invention patents. Received the First Prize and Second Prize of the Science and Technology Progress Award from the China Electrotechnical Society, as well as multiple outstanding paper and presentation awards at domestic and international conferences. Serves as a Guest Editor for High Voltage Engineering and is a member of the IEEE PES Power Equipment Digital Twin Working Group.

陈庚，博士，副教授，华北电力大学电气与电子工程学院。主要从事环保型气体绝缘输变电装备、电荷/电场带电测量、极端条件下的绝缘与放电等领域的研究，参与研制±100kV、±320kV 环保型直流 GIL 和±550kV 直流 GIS 样机，相关成果获北京市自然科学奖一等奖，电力科学技术进步奖一等奖。主持国家自然科学基金青年项目、智能电网国家科技重大专项子课题、山东省重点研发计划子课题、清华大学全国重点实验室开放基金等。发表 SCI 论文 30 余篇，授权/申请发明专利 10 余项，担任 IEEE P3545 工作组秘书、中国复合材料学会介电高分子复合材料及应用专委会委员、北京电机工程学会高电压专委会委员，两次获 IET High Voltage 优秀审稿人。

Geng Chen, Ph.D., Associate Professor, School of Electrical and Electronic Engineering, North China Electric Power University. Mainly engaged in research on environmentally friendly gas-insulated power transmission equipment, charged charge/electric field measurement, insulation and discharge under extreme conditions. Participated in the development of ±100kV, ±320kV environmentally friendly DC GIL and ±550kV DC GIS prototypes. Related achievements won the Beijing Natural Science Award First Prize and the Electric Power Science and Technology Progress Award First Prize. Presided over the National Natural Science Foundation Youth Project, sub-projects of the Smart Grid National Science and Technology Major Project, sub-projects of the Shandong Provincial Key R&D Program, and the Open Fund of the State Key Laboratory at Tsinghua University. Published over 30 SCI papers, granted/applied for over 10 invention patents. Serves as Secretary of the IEEE P3545 Working Group, Member of the Dielectric Polymer Composites and Applications Committee of the Chinese Society for Composite Materials, and Member of the High Voltage Committee of the Beijing Electrical Engineering Society. Received the IET High Voltage Outstanding Reviewer award twice.

分论坛二：直流输电控制保护技术

刘涛，南网科研院研究员，IEEE PES 直流电力系统技术委员会直流输电控制与保护技术分委会常务理事、直流输电控制策略与技术研究工作组召集人。长期从事直流输电工程与电力电子设备的控制保护技术研究、成套设计和现场调试工作。参与完成南澳多端柔性直流工程、鲁西背靠背工程、禄高肇三端常规直流、广东电网直流背靠背广州工程与东莞工程的控制保护策略研究与系统设计。曾获得 2018 年中国机械工业科技进步一等奖、2021 年广东省专利金奖、2023 年中国电工技术学会科技进步一等奖等多项奖励。

Tao Liu, researcher at CSG Electric Power Research Institute. He is a standing director of the IEEE PES Control and Protection Subcommittee, DC Power System Committee, and convenor of the Working Group on HVDC Transmission Control Strategies and Technology Research. He has long been engaged in research on control and protection research, system design and field commissioning of HVDC transmission projects and power electronic equipment. He participated in control protection strategy research and system design for the Nan'ao VSC-MTDC project, the Luxi Back-to-Back project, the Lu-Gao-Zhao three-terminal HVDC project, and the Guangzhou and Dongguan Back-to-Back Flexible HVDC system. He has received numerous awards, including the First Prize of China Machinery Industry Scientific and Technological Progress Award in 2018, the Guangdong Province Patent Gold Award in 2021, and the First Prize of China Electrotechnical Society Scientific and Technological Progress Award in 2023.

王莹鑫，工学博士，中级工程师，国网经研院直流技术咨询中心专责，主要从事柔性直流输电工程成套设计工作，承担国家、国网级科技项目 10 余项，发表论文 10 余篇（其中，SCI/EI 期刊 8 篇），授权发明专利 15 项，牵头或参与编制国家标准、团体标准、企业标准等 4 项。担任上海海上风电送出工程成套设计副项目经理、沙特中西柔直工程联调项目经理；担任含特高压直流、海外柔直、海上风电等 10 余项工程的成套设计主设人。

Yingxin Wang, Ph.D. in Engineering, Intermediate Engineer, serves as a Specialist at the DC Technology Consulting Center of State Grid's Economic and Technological Research Institute. Her primary focus is on system design for flexible DC transmission projects. She has undertaken more than 10 national and State Grid-level scientific research projects, published over 10 papers (including 8 indexed in SCI/EI), and been granted 15 invention patents. She has led or participated in the formulation of 4 standards, including national, association, and enterprise standards.

She has held key positions such as Deputy Project Manager for the system design of the Shanghai Offshore Wind Power VSC-HVDC Project and Project Manager for the Joint Debugging of the COA-WOA VSC-HVDC Project. Additionally, she has served as Designer for the system design of more than 10 major projects, including UHVDC projects, overseas flexible DC projects, and offshore wind power transmission projects.

武霁阳，南方电网超高压公司电力科研院高级研究员，长期从事高压直流输电系统控制保护技术、仿真试验技术研究。曾获2022年中电联电力科技创新奖一等奖、2024年中国电机工程学会电力科学技术奖三等奖等科技奖励。

Jiyang Wu, senior researcher at the Electric Power Research Institute of EHV Company, CSG, has long been engaged in research on HVDC control and protection technologies and HVDC simulation and testing techniques. He was the recipents of the First Prize of the 2022 CEC Electric Power Science and Technology Innovation Award and the Third Prize of the 2024 CSEE Electric Power Science and Technology Award.

李录照，工程师，科汇电气公司产品总监，主要研究方向为电力系统测试仪器及自动化装置。

Luzhao Li (B. 1973, M), Product Director & Engineer at Kehui Electric Company. His primary research area encompasses power system testing instruments and automation devices.

刘航，南方电网超高压公司电力科研院资深研究员，长期从事高压直流输电系统控制保护技术、试验调试技术研究。曾获2023年电力科技创新奖一等奖、2023年中国电工技术学会科学技术奖一等奖、2024年中国电机工程学会电力科学技术奖二等奖、2024年机械工业科学技术奖二等奖.

Hang Liu, senior researcher at the Electric Power Research Institute of EHV Company, CSG, has long been engaged in research on HVDC control and protection technologies and HVDC commissioning and testing techniques. He was the recipents of the First Prize of the 2023 Electric Power Science and Technology Innovation Award, the First Prize of the 2023 Science and Technology Award by the China Electrotechnical Society, the Second Prize of the 2024 Electric Power Science and Technology Award by the Chinese Society for Electrical Engineering, and the Second Prize of the 2024 Science and Technology Award of the Machinery Industry.

张大海，北京交通大学教授、博导，长期从事电力系统及其自动化领域的教学和科研工作，主要研究方向包括调度自动化、交直流电网继电保护，主持和参与包括国家重点研发计划、国家自然科学基金等科研项目50余项，已发表论文100多篇，授权国家发明专利20余项，获2007年山东省科技进步一等奖，2019年中国电工技术学会科学技术奖一等奖，2020年中国电机工程学会科学技术进步奖一等奖。

Zhang Dahai, a professor and doctoral supervisor at Beijing Jiaotong University, has been engaged in teaching and research in the field of power systems and automation for a long time. His main research directions include dispatch automation and AC/DC power grid relay protection. He has led and participated in more than 50 research projects, including the National Key Research and Development Program and the National Natural Science Foundation. He has published more than 100 papers and authorized more than 20 national invention patents. He won the first prize of Shandong Provincial Science and Technology Progress Award in 2007, the first prize of China Electrotechnical Society Science and Technology Award in 2019, and the first prize of China Electrical Engineering Society Science and Technology Progress Award in 2020.

分论坛三：直流配电网技术(含低频输电技术)

李周，东南大学，副教授，博导。任电气工程学院电力工程系主任、电力系统自动化研究所副所长，兼任 IEEE 电力与能源协会直流电力系统技术委员会理事，江苏省可再生能源学会标准化工作委员会副主任。主要从事于交直流混合输电运行与控制，直流电网协调控制，新能源直流并网技术等领域的研究。主持或参与国家重点研发计划项目、国家自然科学基金项目、以及与中国国家电网公司、英国国家电网公司、中国电力科学研究院、国电南瑞集团等单位合作的纵、横向课题 20 余项。发表 SCI/EI 收录的学术论文 30 余篇，受理和授权 20 余项国际及中国发明专利，牵头及参与起草《交直流混联电网直流系统辅助决策技术要求》等江苏省电工技术学会团体标准多项。获国网江苏省电力有限公司科学技术进步特等奖、江苏省教学成果二等奖、IEEE PES 南京分会杰出年轻工程师等荣誉称号。

Zhou Li, Southeast University, Associate Professor, Doctoral Supervisor. He serves as the Director of the Department of Power Engineering, School of Electrical Engineering, and the Deputy Director of the Institute of Power System Automation. He also holds concurrent positions as a member of the IEEE Power & Energy Society (PES) Technical Committee on DC Power Systems and the Deputy Director of the Standardization Working Committee of the Jiangsu Renewable Energy Society. His research focuses on the operation and control of AC/DC hybrid power transmission, coordinated control of DC power grids, and Renewable energy integration by DC grid. He has presided over or participated in 20+ research projects, including key national R&D programs, National Natural Science Foundation of China projects, and collaborative projects with organizations such as State Grid Corporation of China, National Grid UK, China Electric Power Research Institute, and NARI Technology Corporation. He has published 30+ academic papers indexed by SCI/EI and has filed or been granted 20+ international/Chinese invention patents. He has led and participated in drafting multiple group standards, including Technical Requirements for DC System Decision Support in AC/DC Hybrid Power Grids, under the Jiangsu Electrical Engineering Society. He has received several honors, including the Special Award for Science and Technology Progress from State Grid Jiangsu Electric Power Company, the Second Prize for Jiangsu Teaching Achievements, and the title of Outstanding Young Engineer of IEEE PES Nanjing Chapter.

葛雪峰，高级工程师，长期从事交直流混合配电网、电力电子功率变换等方面工作和研究，作为主要骨干负责同里交直流混合配电网和扬中整县光伏工程理论研究及调试运行工作，获江苏省电机工程学会先进个人等称号。获中国机械奖等省部级科学技术奖励4项，累计发表核心及以上论文10余篇，获第一发明人授权发明专利20余项，作为主要完成人发布IEC等标准五项。合著专著4本。

Xuefeng Ge, Senior Engineer, has long been engaged in work and research on AC/DC hybrid distribution networks and power electronic power conversion. As a key team member, he has been responsible for the theoretical research, commissioning, and operation of the AC/DC hybrid distribution network in Tongli and the county-wide photovoltaic project in Yangzhong city. He has received titles such as "Outstanding Individual" from the Jiangsu Province Electrical Engineering Society. He has won four provincial and ministerial-level scientific and technological awards, including the China Machinery Award. He has published over 10 core journal papers, and obtained more than 20 authorized invention patents as the first inventor. As a major contributor, he has published five standards including IEC standards and has co-authored four monographs.

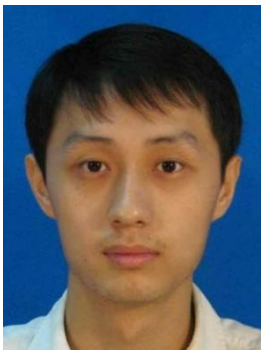
王峰，工学博士，国网山东省电力公司青年托举人才，IEC/TC57标委会委员，长期从事配电自动化、配电网运行分析与控制等方向科技研发和技术服务工作。近年来，以第一作者发表SCI及EI期刊论文11篇，授权发明专利12项，出版专著2部，发布IEC国际标准1项、企业标准3项，主持及参与国家级、国网公司、省公司科技项目十余项，相关研究成果获省部级科技奖励9项，其中一等奖4项，二等奖3项，三等奖1项。

Feng Wang, Doctor of Engineering, Young Talent Supported by State Grid Shandong Electric Power Company, Member of IEC/TC57 Technical Committee. He/She has long been engaged in scientific and technological R&D as well as technical services in the fields of distribution automation, distribution network operation analysis and control. In recent years, he/she has published 11 SCI and EI journal papers as the first author, obtained 12 authorized invention patents, published 2 monographs, released 1 IEC international standard and 3 enterprise standards, and presided over or

participated in more than 10 national-level, State Grid Corporation, and provincial-level projects. Relevant research achievements have won 9 provincial and ministerial-level scientific and technological awards, including 4 first prizes, 3 second prizes, and 1 third prize.

邵帅，浙江大学副教授，博导，长期从事基于碳化硅器件直串技术、中压电压源换流器及固态变压器研究。主持完成多项国家自然科学基金项目、国家重点研发计划子课题以及重大企业项目，相关研究成果发表 SCI/EI 80 余篇，H 因子 25，高被引论文 2 篇，授权中、美发明专利 10 余项。担任 IEEE PELS 中国区会议工作分委副主任委员、中国电源学会青工委常务委员，连续入选“全球前 2%科学家”榜单，获 IEEE Transactions on Industrial Applications 最佳论文一等奖、浙江省科技进步二等奖。

Shuai Shao is an Associate Professor and Ph.D. supervisor at Zhejiang University. His research focuses on series-connected SiC power devices, medium-voltage voltage-source converters (VSCs), and solid-state transformers (SSTs). He has led and completed multiple projects funded by the National Natural Science Foundation of China, subprojects of the National Key R&D Program, and major industry collaborations. He has authored 80+ SCI/EI-indexed publications (H-index 25), including two Highly Cited Papers, and holds 10+ granted Chinese and US invention patents. He serves as Vice-Chair of the IEEE PELS China Conference Working Subcommittee and a Standing Member of the Young Professionals Committee of the CPSS. He has been listed among the world’s top 2% scientists for consecutive years and received the IEEE Transactions on Industrial Applications First Prize Paper Award and the Zhejiang Provincial Science and Technology Progress Award (Second Prize).



张笑天，西安交通大学电气工程学院副教授，主要研究领域包括柔性直流输电、直流潮流控制器和电力电子变压器。他曾获英国利物浦大学最佳博士论文奖 Robert Leggett Prize，并在 2023 年获得陕西省科技工作者创新创业大赛三等奖。他主持了国家重点研发计划子课题，参与多个重要科研项目，他在国际权威期刊上发表了 50 余篇学术论文，已有 1265 次 Google 学术引用，H 指数为 17，4 篇论文被引用超过百次。此外，他还申请了 9 项发明专利，其中 7 项已获得授权。

Xiaotian Zhang is an Associate Professor at the School of Electrical Engineering, Xi’an Jiaotong University. His main research interests include flexible DC transmission, DC power flow controllers, and power electronic transformers. He received the Robert Leggett Prize for the Best Ph.D. Thesis from the University of Liverpool, UK, and won the Third Prize in the 2023 Shaanxi Provincial Innovation and Entrepreneurship Competition for Scientific and Technological Workers. He has led a subproject of the National Key R&D Program and participated in several major research projects. Dr. Zhang has published more than 50 papers in leading international journals, with 1,265 Google Scholar citations and an H-index of 17, including four papers cited over 100 times. In addition, he has applied for nine invention patents, seven of which have been granted.

刁兆炜，西安交通大学助理教授，西安交通大学-西安高压电器研究院股份有限公司联合培养博士后，2024 年获得西安交通大学电气工程博士学位，主要从事开关装备智能制造、大容量交直流开断等研究。主持国家自然科学基金项目，参与国家重点研发计划、陕西省重点研发计划等国家级省部级项目。在 IDCOMPU 2025、EENES 2025 会议上作特邀报告，并在 ICOPS 2024、ACPEE 2024 等会议上作口头报告。已发表 SCI/EI 论文 11 篇，申请发明专利 13 项，获第三届全国博士后创新创业大赛金奖。

Zhaowei Diao, Assistant Professor of Xi’an Jiaotong University, XJTU-XIHARI Joint Postdoctoral Program. He received his doctor's degree in electrical engineering from Xi’an Jiaotong University at 2024. His main research field is intelligent manufacturing of power equipment, design and application of high-capacity switcher. Currently he is the investigator for the National Natural Science Foundation of China (NSFC) Young Scientist Fund project and participated as a key contributor in multiple research initiatives including National Key R&D Program projects, Shaanxi Provincial Key R&D Program projects. He delivered an invited presentation at the IDCOMPU 2025, EENES 2025, and gave oral presentations at conferences including ICOPS 2024, ACPEE 2024. He has published 11 SCI/EI papers and applied for 13 invention patents, won the Gold Award at 3rd China Postdoctoral Innovation and Entrepreneurship Competition.

分论坛四：直流输配电系统仿真技术

姚蜀军，博士，副教授，华北电力大学柔性电力研究所。主要研究方向为电力系统电磁暂态仿真。主持国家自然基金面上项目2项，参与国家重点研发项目3项。发表与仿真相关文章30余篇，国际专利授权1项，国内授权专利12项。全自主化研发了电磁暂态仿真软件平台的建模库和求解器，具有7万余行代码和专业的软件架构设计。

Shujun Yao, Ph.D., is an Associate Professor at the Flexible Power Institute of North China Electric Power University. His primary research focus is on electromagnetic transient simulation in power systems. He has presided over two General Programs of the National Natural Science Foundation of China and participated in three National Key R&D Program projects. He has published over 30 simulation-related articles, obtained one international patent authorization, and holds 12 authorized domestic patents. He independently developed the modeling library and solver for a fully self-developed electromagnetic transient simulation software platform, comprising over 70,000 lines of code with a professional software architecture design.

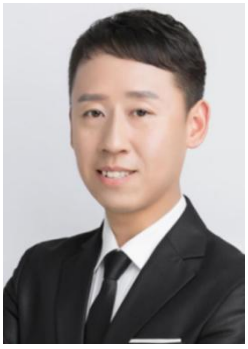
石祥花，博士，IEEE高级会员，海外高层次人才，国家电投中央研究院新能源与未来技术研究所技术专家。2011年和2014年分别获得南京航空航天大学的电气工程及其自动化学士学位和电力电子与电气传动的硕士学位。2019年获得加拿大曼尼托巴大学博士学位，其后，加入加拿大RTDS技术公司，担任高级仿真工程师。在2025年6月，加入国家电投中央研究院新能源所。主要研究方向为柔性直流输电技术、新能源发电系统控制和仿真技术、并构网技术、系统稳定性分析等。发表学术论文25篇，国内授权专利1项。

Xianghua Shi, Ph.D., IEEE Senior Member, Overseas High-Level Talent, Technical Expert at the Institute of New Energy and Future Technology, State Power Investment Corporation (SPIC) Central Research Institute. She obtained her Bachelor's degree in Electrical Engineering and Automation and Master's degree in Power Electronics and Electrical Drives from Nanjing University of Aeronautics and Astronautics (NUAA) in 2011 and 2014, respectively. She received her Ph.D. degree from the University of Manitoba, Canada in 2019, after which she joined RTDS Technologies Inc. (Canada) as

a Senior Simulation Engineer. In June 2025, she joined the Institute of New Energy, SPIC Central Research Institute. Her main research interests include flexible HVDC transmission technology, control and simulation technologies for new energy power generation systems, grid connection and integration technology, and system stability analysis. She has published 25 academic papers and holds 1 domestically authorized patent.

徐晋，博士，上海交通大学电气工程学院副教授，博士生导师。主要研究新能源接入电力系统的实时仿真技术。发表 SCI 论文 20 余篇，EI 论文 40 余篇，自主研发了电力电子化系统实时仿真平台，成功解决高频电力电子虚拟功率损耗、多端口级联设备通用等值建模等难题，研究成果得到 EMTP-RV、RTDS 等国际知名仿真技术团队的引用。入选 2020 年度博士后创新人才支持计划（全国电气工程专业仅 8 人入选），获得国家自然科学基金面上项目、青年项目、中国博士后基金面上项目等资助。曾组织 IET RPG 新能源建模仿真专刊、PEDG 2023 实时仿真专题。

Jin Xu, Ph.D., associate professor and doctoral supervisor at the School of Electrical Engineering, Shanghai Jiao Tong University. His main research focus is on real-time simulation technologies for the integration of new energy into power systems. He has published over 20 SCI papers and over 40 EI papers. He has developed a real-time simulation platform for power electronic systems and successfully solved problems such as high-frequency power electronic virtual power loss and general equivalent modeling for multi-port cascaded devices. His research results have been cited by international renowned simulation technology teams such as EMTP-RV and RTDS. He was selected for the 2020 Postdoctoral Innovation Talent Support Program (only 8 people in the national electrical engineering field were selected), and received funding from the National Science Foundation of China, and the China Postdoctoral Foundation. He has organized the IET RPG New Energy Modeling Special Issue and the PEDG 2023 Real-Time Simulation Special Topic.



侯院军，现任上海大阈信息技术有限公司副总经理，博士，高级工程师，IEEE PES 直流电力系统技术委员会常务理事、中国电源学会新能源电能变换技术委员会委员、IEEE 电力与能源协会中国区储能技术委员会理事，中国节能协会光储直柔专委会委员。从事新能源行业 15 年，主要研究研究新能源微电网组网、变换和光储直柔技术、新能源变换器、直流微电网电能路由器和能源管理器技术，是上海工程技术大学、扬州大学、西北农林科技大学研究生导师。研发开发双馈和直驱风电变流器 2 款，设计并承担交直流混合微电网 10 余项，承担上海市科委 2020 年度《基于直流微电网技术的智慧建筑能源系统应用示范》和上海市科委 2021 年度《高层建筑光伏柔性直流用电关键技术研究及应用》项目建设，起草《智慧直流建筑能源系统应用技术规程》团体标准一项。

Yuanjun Hou, Ph.D., Senior Engineer, the Vice President of Shanghai Dayu Information Technology Co., Ltd. Executive Director of the IEEE PES DC Power System Technology Committee,Member of the New Energy Power Conversion Technology Committee of the China Power Supply Society,Director of the IEEE PES, Member of the Photovoltaic-Storage-Direct-Flexibility Specialized Committee of the China Energy Conservation Association.With over 15 years of experience in the new energy industry, his primary research focuses on new energy microgrid networking, conversion, PV-Storage-Direct-Flexibility (PSDF) technology, new energy converters, DC microgrid power routers, and energy management systems.Leading the development of two types of doubly-fed and direct-drive wind power converters. Designing and overseeing more than 10 AC/DC hybrid microgrid projects. Serving as 2 Projects Lead for key Shanghai Municipal Science and Technology Commission initiatives.Drafting the group standard <Technical Specification for Application of Smart DC Building Energy Systems>.

罗超，博士，高级工程师，南方电网公司三级拔尖技术专家，主要从事新能源并网运行控制与仿真建模等方面的研究工作。在新型电力系统宽频振荡方面开展了建模方法、机理分析以及抑制方法的体系化研究，承担南网公司科技项目 2 项，作为技术骨干参与国家重点研发计划项目 2 项，获得广东省科技进步二等奖、南方电网科技进步奖二等奖等奖励，发表 SCI/EI 检索论文 5 篇。

Chao Luo, Ph.D., Senior Engineer, Level-3 Distinguished Technical Expert of China Southern Power Grid Co., Ltd., mainly engages in research on the operation control and simulation modeling of new energy grid connection. He has conducted systematic research on modeling methods, mechanism analysis, and suppression technologies for wide-frequency oscillations in new power systems. He has undertaken 2 scientific and technological projects of China Southern Power Grid Co., Ltd., participated as a core technical member in 2 national key R&D program projects, and won awards including the Second Class Prize of Guangdong Provincial Science and Technology Progress Award and the Second Class Prize of China Southern Power Grid Science and Technology Progress Award. He has published 5 papers indexed by SCI/EI.

分论坛五：低压直流技术

李亚辉，山东大学助理研究员，长期从事电力系统电能质量领域相关工作。近年来，发表SCI/EI收录论文20余篇，授权发明专利10余项，主持国家级项目2项、省部级项目2项。

Yahui Li, Assistant Researcher at Shandong University. He has long been engaged in research related to power quality in power systems. In recent years, he has published more than 20 papers indexed by SCI/EI, obtained over 10 authorized invention patents, and presided 2 national-level projects and 2 provincial and ministerial-level projects.

谢香敏，工学博士，青岛大学副教授，长期从事新型电力系统电能质量谐波建模与评估工作，入选 2025 年山东省青年科技人才托举工程，近 5 年以第一/通讯作者发表论文 20 余篇，均被 SCI/EI 收录，其中 2 篇论文入选全球 ESI 高被引论文，主持国家自然科学基金及省部级基金项目 5 项，授权/申请国家发明专利 11 项。

Xiangmin Xie, Ph.D. in Engineering, Associate Professor at Qingdao University, has long been engaged in the modeling and evaluation of power quality harmonics in new-type power systems. He was selected into the Shandong Provincial Young Scientific and Technological Talents Support Program in 2025. Over the past five years, he has published more than 20 papers as the first/corresponding author, all of which are indexed by SCI/EI. Among them, 2 papers have been listed as ESI Highly Cited Papers globally. He has presided over 5 projects funded by the National Natural Science Foundation of China and provincial/municipal-level scientific research programs, and holds 11 authorized/pending national invention patents.

孙凯祺，山东大学副研究员，长期从事直流输配电系统运行与控制研究，入选中国科协青年人才托举工程，获山东省自然科学基金（B 类）资助，主持国家自然科学基金、国家重点研发计划子课题在内国际级/省部级项目课题 7 项，以第一作者发表 SCI 期刊论文 34 篇，获山东省科技进步一等奖、自然科学二等奖等。

Kaiqi Sun, Associate Research Fellow at Shandong University, has long been engaged in research on the operation and control of DC power transmission and distribution systems. He was selected into the China Association for Science and Technology (CAST) Young Talent Lifting Program and supported by the Shandong Provincial Natural Science Foundation (Class B). He has presided over 7 national and provincial-level projects, including sub-projects of the National Key Research and Development Program of China and the National Natural Science Foundation of China (NSFC). As the first author, he has published 34 SCI journal papers and won awards such as the First Prize of Shandong Provincial Science and Technology Progress Award and the Second Prize of Shandong Provincial Natural Science Award.

尹睿，工学博士，中国电力科学研究院有限公司系统所业务工程师。长期从事新能源、柔直等电力电子装备接入电网稳定性研究工作。主持/参与国家电网公司科技项目等 5 项，以第一作者发表 SCI/EI 期刊论文 9 篇，受理/授权专利 10 余项。

Rui Yin, Ph.D. in Engineering, Business Engineer at the Systems Institute of China Electric Power Research Institute. Research efforts have been devoted to power system stability issues associated with the integration of power electronic equipment, with emphasis on new energy systems and VSC-HVDC technologies. Five science and technology projects supported by the State Grid Corporation of China have been led or participated in. A total of nine SCI/EI-indexed journal papers have been published as first-author contributions, and more than ten patents have been filed or granted.

刘洋，工学博士，正高级工程师，现任国网山东省电力公司电力科学研究院配电技术中心副主任，主要从事规模化分布式资源管控、柔性配电网、配电能源互联网等技术支撑与创新研发工作，承担国家、国网级科技项目 10 余项，发表论文 30 余篇（其中，SCI 期刊 4 篇），授权发明专利 30 余项，牵头或参与编制国家标准、企业标准、团体标准等 7 项。获得山东省科技进步一等奖、中国电力科技进步二等奖等省部级奖励 7 项。

Yang Liu, Ph.D. in Engineering, Professor-Level Senior Engineer, currently serves as the Deputy Director of the Distribution Technology Center at the Electric Power Research Institute of State Grid Shandong Electric Power Company. His primary focus lies in technical support and R&D innovationfor large-scale distributed resource management, flexible distribution networks, and distribution energy internet technologies. He has undertaken more than 10 national and State Grid-level scientific research projects, published over 30 papers(including 4 in SCI-indexed journals), and been granted more than 30 invention patents. Dr. Liu has led or participated in the drafting of 7 standards, including national, corporate, and association standards. His contributions have been recognized with 7 provincial/ministerial-level awards, such as the Shandong Province Scientific and Technological Progress First Prize and the China Electric Power Science and Technology Progress Second Prize.

分论坛六：直流系统规划与设计

黄莹，浙江大学电气学院副院长，求是特聘教授，博导，入选国家科技创新领军人才，享国务院政府特殊津贴，担任中国科协第十届委员会委员、IEEE 中国地区女工委主席、中国电机工程学会常务理事、全国直流输电设备等标委会委员等。长期从事交直流系统分析、直流输电技术、新能源并网技术等研究。获国家科技进步奖特等奖、一等奖各 1 项；获得多项省部级科技奖，获全国巾帼建功标兵，中国电力科学技术杰出贡献奖等。

Ying Huang, Vice Dean of the School of Electrical Engineering at Zhejiang University, Professor, doctoral supervisor,. Serves as a member of the 10th Committee of the China Association for Science and Technology, Chair of the IEEE PCCC WIP, and member of the National Standardization Committee for DC Transmission Equipment. Engaged in long-term research on AC/DC system analysis, HVDC transmission technology, and renewable energy grid integration. Awarded the National Science and Technology Progress Award (Special Prize and First Prize each once), multiple provincial and ministerial-level science and technology awards, the National Outstanding Women's Model, and the China Electric Power Science and Technology Outstanding Contribution Award.

王建武，正高级工程师，博士研究生，中国能源建设集团广东省电力设计研究院有限公司电网工程公司副总经理。工作和研究方向为高压交直流输电设计、柔性交直流输电设计和新能源消纳技术，作为技术负责人完成南方电网和国家电网多个特高压直流输电工程设计工作。深耕海上风电柔性直流送出技术研究，作为项目负责人完成阳江青洲五七海上风电场海缆集中送出工程和阳江三山岛海上风电柔性直流输电示范工程的研究和设计工作。在海风柔直领域发表论文 10 余篇，取得授权发明专利多项，参与制定《海上柔性直流换流站设计规程》等多项行业和团体标准。

Jianwu Wang (born in 1981), Professorate Senior Engineer. He received Doctoral degree from Wuhan University, China. He serves as the Deputy General Manager of the Power Grid Engineering

Company of China Energy Engineering Group Guangdong Electric Power Design Institute Co.,LTD. He has long been dedicated to planning, design, and research in the fields of HVAC and HVDC transmission systems, flexible AC and DC transmission designs, and new energy integration technologies. As the technical lead, he has successfully completed numerous UHV DC transmission projects for both China Southern Power Grid and the State Grid. He has dedicated significant efforts to researching flexible DC transmission technology for offshore wind power. As the project leader, he has overseen the research and design of the Yangjiang Qingzhou Wuqi Offshore Wind Farm Cable Centralized Transmission Project and the Yangjiang Sanshan Island Offshore Wind Power Flexible DC Transmission Demonstration Project. He has authored over 10 papers in the field of offshore wind power flexible DC transmission and holds multiple authorized invention patents. Additionally, he has contributed to the development of various industry and community standards, including the " Code for design of offshore VSC-HVDC converter station "

熊小玲，女，华北电力大学副教授/博士生导师。主要从事新能源并网系统的建模和稳定性分析、柔性直流输电系统建模、分析与控制等方面的研究工作。主持智能电网重大专项课题 1 项、国家自然科学基金项目 2 项，国家重点研发计划子课题 2 项、作为执行人申请和参研国家自然科学基金联合基金 1 项等，完成和参与电网公司科研课题 10 余项，在国内外重要学术期刊和会议上发表研究论文 70 余篇。

Xiaoling Xiong (Senior Member, IEEE), Associate Professor/Doctoral Supervisor at North China Electric Power University. The research work mainly focus on modeling and stability analysis of renewable energy grid-connected systems, modeling, analysis, and control of flexible DC transmission systems. As a PI, has been funded by a Smart-Grid National Science and Technology Major Project, two projects funded by the National Natural Science Foundation of China, two sub-projects of the National Key Research and Development Program, and one joint fund project of the National Natural Science Foundation of China as an executor.She also completed and participated in more than 10 scientific research projects of power grid companies, and published more than 70 research papers in important academic journals and conferences.

殷天翔，工学博士，华中科技大学电气与电子工程学院助理研究员，曾于英国帝国理工学院 Control and Power Research Group (CAP)、诺丁汉大学 Power Electronics and Machines Centre (PEMC)从事博士后研究工作。长期从事高功率密度柔性直流输配电换流器的研究工作，主持/参与 Innovate UK 等课题项目 4 项，发表论文 20 余篇，授权发明专利 10 余项，获 IEEE APEC 优秀报告奖等会议奖项 5 项，柔直输配电换流器方案获中国国际高新技术成果交易会优秀产品奖，获 IEEE TIE 优秀审稿人奖。

Tianxiang Yin received the Ph.D. degree in Engineering and is currently an Assistant Researcher with the School of Electrical and Electronic Engineering, Huazhong University of Science and Technology (HUST). He previously conducted postdoctoral research with the Control and Power Research Group (CAP) at Imperial College London and the Power Electronics and Machines Centre (PEMC) at the University of Nottingham. His research focuses on high - power-density converters for flexible HVDC transmission and distribution. He has led or participated in four projects, including those funded by Innovate UK. He has published over 20 papers and holds more than 10 granted invention patents. He has received five conference awards, including the IEEE APEC Outstanding Presentation Award. His flexible HVDC converter scheme won the Excellent Product Award at the China Hi-Tech Fair. He is also a recipient of the IEEE TIE Outstanding Reviewer Award.

宋志顺，男，高级工程师。西安西电电力系统有限公司技术总监，主要负责海上风电、柔性直流输电系统研究及成套设计工作。

参与完成了±800kV/5000MW特高压、±350kV/1000MW柔性直流输电换流阀等多个首台套装置研制及关键技术研究。负责完成了公司±800kV/8000MW柔性直流输电换流阀运行特性及荷兰Ijmuiden±525kV/2GW海上风电柔性直流送出咨询项目系统研究工作。

先后荣获省部级科技进步一等奖2项，中国电气装备集团及中国西电集团级科技类奖项10余项。

Zhishun Song, male, senior engineer. Technical director of Xi 'an XD Power Systems Co., LTD., mainly responsible for the system study and integration design of offshore wind power and VSC-HVDC.

Participated in the development of multiple first set of devices and key technology research for ±800kV/5000MW ultra-high voltage and ±350kV/1000MW VSC-HVDC valves. Responsible for the research on the operational characteristics of ±800kV/8000MW VSC-HVDC converter valves of the company and the research work for the ±525kV/2GW Ijmuiden offshore wind power VSC-HVDC consulting project in Netherlands.

Has successively won two first prizes for scientific and technological progress at the provincial and ministerial level, as well as over ten science and technology awards at the level of China Electrical Equipment Group and China XD Group.

五、赞助单位

荣信汇科电气股份有限公司

荣信汇科电气股份有限公司成立于2017年，是专业从事新型电力系统核心装备研发、制造、销售及服务的高新技术企业，工信部认定的国家级专精特新“小巨人”企业，辽宁省潜在独角兽企业、辽宁省制造业单项冠军示范企业、辽宁省智能工厂、辽宁省数字化车间。

公司主要为客户提供柔性输电成套装置、大功率变流器等高端装备和技术服务，广泛应用于新型电力系统“源-网-荷-储”各领域，具体包括高效发电、电力输配、油气管网、电能存储、船舶制造、冶金化工等重要行业和重大工程，助力构建以新能源为主体的新型电力系统，促进世界电力高端装备的技术革新。

山东科汇电力自动化股份有限公司

山东科汇电力自动化股份有限公司（简称：科汇股份，证券代码：688681）地处鲁中工业名城淄博，致力于电力自动化、电力电缆故障检测、储能与智慧能源管理以及磁阻电机技术的研发与产业化，拥有一支以徐丙垠教授为学术带头人，博士、硕士为主的专业研发团队，产学研氛围浓厚，科研环境优良。在济南、青岛、武汉和英国伦敦设有全资子公司，在北京、上海、广州、成都、福州等十余个城市设有销售、服务中心。

中天科技海缆股份有限公司

中天科技海缆股份有限公司是江苏中天科技股份有限公司全资子公司，成立于2004年，是我国海缆行业唯一的百亿级企业，工信部认定的“制造业单项冠军示范企业”，国家重点高新技术企业、国家卓越级智能工厂、国家5G工厂、国家知识产权示范企业、江苏省智能制造示范工厂、江苏省智能制造示范车间 。

公司深耕海底光电复合缆、特种海缆产品的研发与应用推广，产品覆盖±550kV及以下直流海缆、500KV及以下交流海缆、8000m水深海底光缆、动态缆、脐带缆、多芯数多功能集束缆等，广泛应用于电网公司、运营商、石油石化、发电集团及新能源等重点领域，海外营销网络覆盖160个国家地区，为海上风电、海洋油气、海上光伏、深海探测、岛屿互联等提供系统解决方案。

九源云（广州）智能科技有限公司

九源云（广州）智能科技有限公司成立于2001年，是国家级高新技术企业，深耕交直流电源核心领域，专注相关智能硬件及系统的研发、制造与技术服务。

公司以交直流电源技术为核心，构建了涵盖高可靠性交直流电源产品、交直流一体化电源系统、蓄电池远程管理系统、智能电源配线设备的核心产品矩阵，并自主研发DCMP 物联网管控平台，形成 “电源硬件 + 智能管控软件 + 端云协同服务” 的全链条解决方案，实现从感知监测、边缘智能调控到云端集中管理的端到端自主可控，核心电源技术及管控算法全面自主研发、自主可控。

秉承 “用户为本、产品为基、质量为先、效率为要” 的理念，九源云深耕能源、交通、政企、通信等行业，提供高安全、高稳定、高效率的交直流电源智能化解决方案，助力客户提升电源管理数字化水平，为产业数字化、网络化、智能化转型筑牢电力支撑，赋能行业高质量升级与创新发展。

六、媒体支持单位

CSEE Journal of Power and Energy Systems

iEnergy

High Voltage

Energy Internet

Smart Power & Energy Security

ECE 能源转换与经济（英文）
Energy ConversionandEconomics
ESCI、EI 数据库收录期刊

中国电机工程学报
Proceedings of the CSEE

电网技术
POWER SYSTEM TECHNOLOGY

电力系统保护与控制
Power System Protection and Control

南方电网技术
SOUTHERN POWER SYSTEM TECHNOLOGY

HIGH VOLTAGE ENGINEERING
高电压技术

EPC 电力建设
ELECTRIC POWER CONSTRUCTION
中文核心期刊　中国科技核心期刊

新型电力系统
New Type Power Systems

南方能源建设
SOUTHERN ENERGY CONSTRUCTION

电气工程学报

浙江电力
ZHEJIANG ELECTRIC POWER

电力信息与通信技术
ELECTRIC POWER INFORMATION AND COMMUNICATION TECHNOLOGY

内蒙古电力技术
NEIMENGGU DIANLI JISHU

电力大数据
POWER SYSTEMS AND BIG DATA

《Renewable Energy System and Equipment》

《智慧电力》　《中国电力》

七、会议须知

■ 参会安排

请参会人员提前15分钟进入会场。开会时遵守并保持会场秩序，手机请调至静音或关闭。

■ 时间及地点

报到时间：11月28日 14:00-22:00

报到地点：北京龙城温德姆酒店大堂

会议时间：11月29日-11月30日

会议地址：北京昌平区昌平路317号, 102208

■ 交通方式

1. 北京首都国际机场

距离约37公里

A. 出租车（推荐）：约45分钟；约150元人民币

B. 地铁：约2小时

乘坐机场线（北新桥方向）➔ 在首都机场T3站上车 ➔ 在三元桥站下车 ➔ 换乘地铁10号线（太阳宫方向） ➔ 在西土城站下车 ➔ 换乘昌平线（昌平西山口方向）➔ 在生命科学园站下车（B1出口）➔ 步行17分钟至酒店

2. 北京大兴国际机场

距离约90公里

A. 出租车（推荐）：约1小时30分钟；约300元人民币

B. 地铁：约1小时50分钟

乘坐大兴机场线（草桥方向）➔ 在大兴机场站上车 ➔ 在草桥站下车 ➔ 换乘地铁19号线（牡丹园方向）➔ 在牡丹园站下车 ➔ 换乘地铁10号线（西土城方向）➔ 在西土城站下车 ➔ 换乘昌平线（昌平西山口方向）➔在生命科学园站下车（B1出口）➔ 步行17分钟至酒店

3. 北京南站

距离约34.6公里

A. 出租车：约1小时15分钟；约115元人民币

B. 地铁：约1小时30分钟

乘坐地铁4号线（安河桥北方向）➔ 在北京南站上车 ➔ 在西直门站下车 ➔ 换乘地铁13号线（东直门方向） ➔ 在清河站下车 ➔ 换乘昌平线（昌平西山口方向） ➔ 在生命科学园站下车（B1出口） ➔ 步行17分钟至酒店

4. 北京西站

距离约32公里

A. 出租车：约1小时；约 100 元

B. 地铁：约1小时30分钟

乘坐地铁9号线（往国家图书馆方向），在北京西站上车 ➔ 在六里桥站下车 ➔ 换乘地铁10号线（往莲花桥方向），在西土城站下车 ➔ 换乘昌平线（往昌平西山口方向），在生命科学园站（B1 出口）下车 ➔ 步行17分钟到达酒店

5. 北京站

距离约30公里

A. 出租车：约52分钟；约100元

B. 地铁：约1小时30分钟

乘坐地铁2号线（往崇文门方向），在北京站上车 → 在西直门站下车→ 换乘地铁13号线（往东直门方向），在清河站下车 → 换乘昌平线（往昌平西山口方向），在生命科学园站（B1出口）下车 → 步行 17 分钟到达酒店

6. 北京丰台站

距离约40公里

A. 出租车：约1小时；约130元

B. 地铁: 约1小时30分钟

乘坐地铁10号线（往泥洼方向），在丰台站上车→ 在西土城站下车 → 换乘昌平线（往昌平西山口方向），在生命科学园站（B1出口）下车 → 步行 17 分钟到达酒店

7. 北京朝阳站

距离约30公里

A. 出租车：约50分钟；约70元人民币

B. 地铁：约1小时28分钟

乘坐地铁3号线（东四十条方向）→ 在朝阳站上车 → 在团结湖站下车 → 换乘地铁10号线（农业展览馆方向） → 在西土城站下车 → 换乘昌平线（昌平西山口方向） → 在生命科学园站下车（B1出口） → 步行17分钟至酒店

■ 会议用餐

日期		地点	时间	备注
11月28日	晚餐	一楼博纳西餐厅	18:00-20:00	自助餐
11月29日	午餐	一楼博纳西餐厅	12:00-14:00	自助餐
	晚餐	一楼博纳西餐厅	17:00-19:00	自助餐
11月30日	午餐	一楼博纳西餐厅	12:00-14:00	自助餐

■ 联系方式

1.参会咨询

北京掘视科技有限公司：高老师18610614976（微信同号）

2.缴费及发票咨询

北京掘视科技有限公司：高老师18610614976（微信同号）

3.酒店住宿咨询

北京龙城温德姆酒店/龙城华美达酒店：高老师18610614976（微信同号）

【温馨提示】

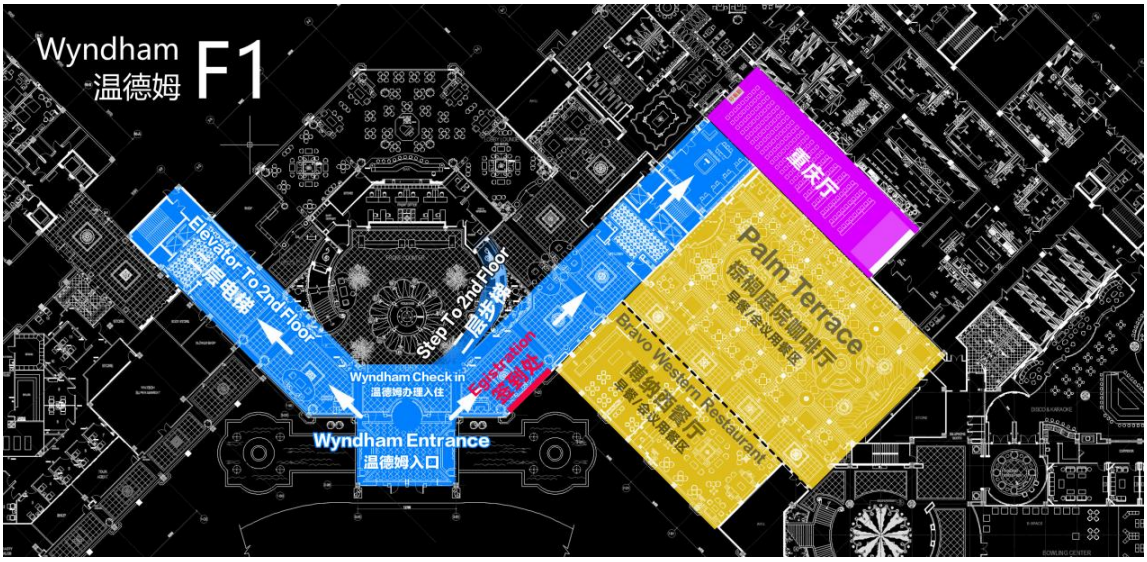
1.会议结束后请参会代表听从工作人员的指引有序退场。

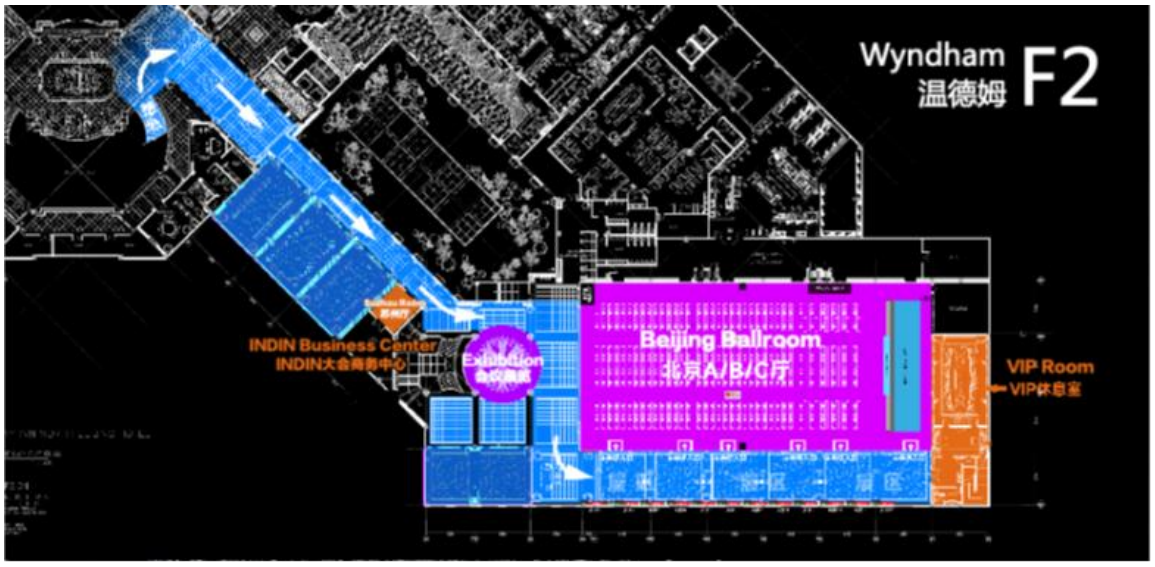
2.会议期间北京市天气情况：

周五（11月28日）	晴朗	-1℃/8℃
周六（11月29日）	晴朗	0℃/9℃
周日（11月30日）	晴朗	-2℃/7℃

■ 会场平面图

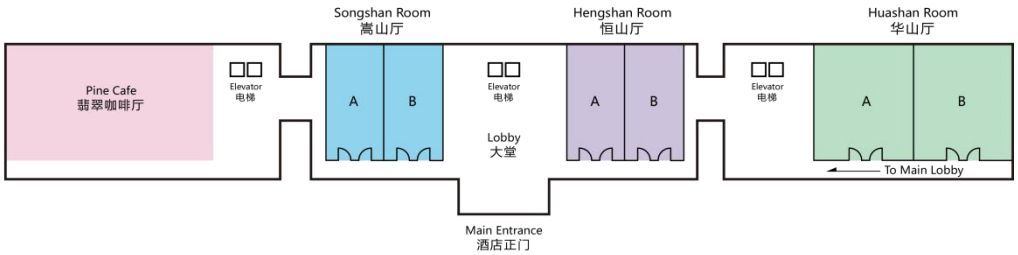
温德姆酒店


Wyndham
温德姆
F1
Elevator To 2nd Floor
电梯至二层
Step To 2nd Floor
步梯至二层
Wyndham Check in
温德姆办理入住
Exhibition
展览区
Wyndham Entrance
温德姆入口
重庆厅
Palm Terrace
棕榈庭院咖啡厅
早餐/会议用餐区
Bravo Western Restaurant
德纳西餐厅
早餐/会议用餐区

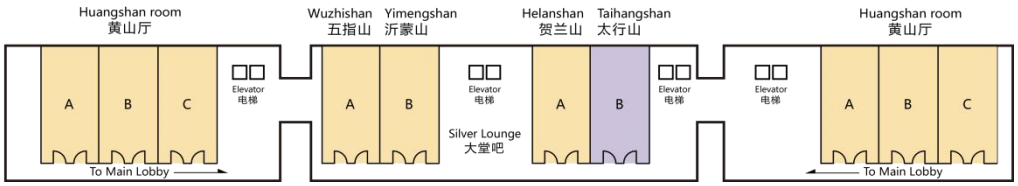

Wyndham
温德姆
F2
INDIN Business Center
INDIN大会商务中心
Exhibition
展览区
Beijing Ballroom
北京A/B/C厅
VIP Room
VIP休息室

华美达酒店

Ramada 华美达 F1



Ramada 华美达 F2



荣信汇科

公司简介 Company profile

荣信汇科电气股份有限公司是专业从事新型电力系统核心装备研发、制造、销售及服务的高新技术企业，主要为客户提供柔性输电成套装置、大功率变流器等高端装备和技术服务。公司产品及服务广泛应用于新型电力系统“源-网-荷-储”各领域，具体包括高效发电、电力输配、油气管网、电能存储、船舶制造、冶金化工等重要行业和重大工程，助力构建以新能源为主体的新型电力系统，促进世界电力高端装备的技术革新。


鞍山总部


鞍山能源装备产业基地

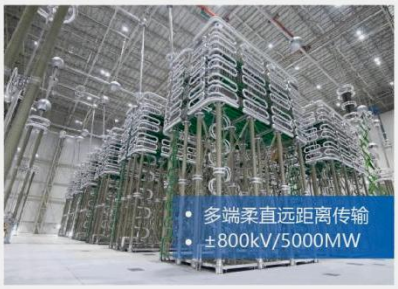

北京控保技术中心


北京系统技术中心


上海研发中心

典型业绩 Typical Project Reference

乌东德电站送电广东广西特高压多端柔性直流示范工程



江苏如东海上风电柔性直流输电工程

粤港澳大湾区直流背靠背工程

白鹤滩-江苏±800kV特高压直流输电工程

阳江青洲五、青洲七海上风电场海缆集中送出工程

沙特中西柔直换流阀工程

荣信汇科电气股份有限公司

辽宁省鞍山市铁东区越岭路212号
+86 400 616 7077
public@rxhk.com
www.rxhk.com

KEHUI
科汇股份

证券代码：688681

持续为用户奉献智能电网与电气驱动创新解决方案

山东科汇电力自动化股份有限公司
Shandong Kehui Power Automation Co., Ltd.

地址：山东省淄博市三赢路16号
服务热线：400-0533 069
销售热线：0533-3181 567
网址：www.kehui.cn

济南科汇 电话：0531-6677 7667
青岛科汇 电话：0532-6801 2536
武汉科汇 电话：027-8266 8396

深远海、大容量海上风电输电系统解决方案

中天科技海缆股份有限公司是江苏中天科技股份有限公司全资子公司，成立于 2004年，是我国海缆行业唯一的百亿级企业，工信部认定的“制造业单项冠军示范企业”，国家重点高新技术企业、国家卓越级智能工厂、国家5G工厂、国家知识产权示范企业、江苏省智能制造示范工厂、江苏省智能制造示范车间 。

公司深耕海底光电复合缆、特种海缆产品的研发与应用推广，产品覆盖500KV及以下交流海缆+550kV及以下直流海缆、8000m水深海底光缆、动态缆、脐带缆、多芯数多功能集束缆等特种海缆，广泛应用于电网公司、运营商、石油石化、发电集团及新能源等重点领域，海外营销网络覆盖160个国家地区，为海上风电、海洋油气、海上光伏、深海探测、岛屿互联等提供系统解决方案。

深远海海上风电超高压交直流海缆、动态海缆系列产品

深远海直流输电系列

电压等级:±550kV及以下

运行温度：90℃及以下

导体截面:5000mm²及以下

传输容量:4GW及以下

超大容量交流输电系列

· 电压等级：500kV及以下

· 导体截面：3000mm²及以下

· 传输容量：1500MW及以下

漂浮式海上风电输电系列

· 电压等级：66kV及以下

· 导体截面：800mm²及以下

· 传输容量：80MW及以下

九源云交直流电源智能运维解决方案

九源云交直流电源智能运维解决方案，可实现对分布在机房的交直流电源、蓄电池组、门禁、空调、温湿度、烟感等的设备运行参数进行实时监测、故障诊断、预警的综合管控。搭载蓄电池监测及远程核容装置完成蓄电池组充放电任务，自动生成充放电报告，实时监测健康状态，对蓄电池状态进行预警、告警推送，提醒运维人员关注。主站平台系统支持双机热备、集群部署，保障系统安全可靠，不间断运行，实现机房的高效运维管理。

① IEC61850智能网关　② 智能直流分配单元　③ 通信蓄电池DC/DC远程核容系统
④ 动力环境综合管控平台　⑤ 配电数据网通信专用后备电源
⑥ 直流电源蓄电池DC/AC远程核容系统　⑦ 通信电源远程核容一体化系统

设备监控
智能预警
信息安全

数据实时传输，安全监控

平台层
动力环境综合管控系统
功能业务：动环监控　资产管理　分权分域　预警分析　运维工单
设备诊断　链路监控　远程控制　计划任务　报表导出
可拓展：传输网管　通信调控　安防监控　机房3D建模　能耗管理
监测数据　人工智能AI　知识库

实时传输（IEC61850、MQTT、MODBUS、HTTP等统一通信协议）

监控层
前端综合监控主机　分布式网关设备　边缘计算核心单元

RS232、RS485、61850、干接点等

前端采集层
动力监控：高频开关柜　操作电源柜　UPS电源系统　交流市电　蓄电池组　配电链路监控
环境监控：精密/工业空调　温湿度　新风机　柜门开关监测　机柜U位占用　水浸/水位器
安防监控：消防烟雾感应　电子围栏　视频摄像机　门禁控制　红外监控　……

历史模型预测，预警推送

远程控制
故障告警
历史数据

九源云(广州)智能科技有限公司

JIUYUANYUN (GUANGZHOU) INTELLIGENT TECHNOLOGY CO., LTD.

10000+㎡ 研发生产基地
400+ 员工
50+ 专利
200+ 软件著作权

九源云成立于2001年，是一家集研发、设计、生产、销售与服务为一体的国家高新技术企业。公司专注于蓄电池远程管理、智能网关、智能控制器、电源设备等产品，搭载自主可控的国产化综合管控平台，全面打造感知监测、边缘智能、端云融合的物联网端到端产品体系。九源云致力于数智化转型发展，为用户提供安全可靠的产品和解决方案，广泛应用于能源、交通、政企、运营商等行业。

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