

19<sup>th</sup> October 2017

## Poster Presentation (updated on 12 September 2017)

## Session A

Poster ID	Paper ID	Paper Title	Authors
PO001	0014	Over-voltage Modeling and Simulation Analysis of Offshore Wind Farm	Zhankui Zhang, Yan Li, Yongning Chi, Linjun Wei, Chao Liu
PO002	0046	Wind Farm HVRT Capability Improvement Based on Coordinated Reactive Power Control Strategy	Yuangong Zhang, Qing Li, Jinping Zhang, Shiyao Qin
PO003	0103	Phasor Model of Full Scale Converter Wind Turbine for Small-Signal Stability Analysis	Radu Gigha, Qiuwei Wu, Arne Hejde Nielsen
PO004	0153	A Novel Simplified Method of Doubly Fed Induction Generator	G B Song, C H Zhang, X B Wang, W Huang
PO005	0171	"HVDC Optimisation" – Driving down the cost of large scale offshore wind	K Siriwardhana, G Jackson, A Canelhas
PO006	0175	Enhanced AC Voltage and Frequency Control on Offshore MMC Station for Wind Farm	Y Jing, R Li, L Xu, Y Wang
PO007	0190	Study on detection of blade imbalance for DFIG wind turbines based on spectrum analysis of Hilbert modulus	Jixing Qiu, Guodong Xu, Junbing Tao, Jing Yang
PO008	0201	Analysis for distribution network on holding capacity of distributed wind turbines considering additional income under procedure conditions	WANG YE, YU YUWEI, ZHANG JIE
PO009	0203	Fault diagnosis of wind turbine planetary gearbox based on order analysis and divergence index	He Chengbing, Cai Shunkai, Sun Dakang, Song Lei
PO010	0213	Analytical determination of stable droop loop gain for a DFIG participating in frequency regulation	Jinqiang Liu, Xiaoru Wang
PO011	0272	Wind Power Curtailment Sequence Characteristic Analysis	Yongzhi Qi, Nan Zhang, Yuehui Huang, Yuefeng Wang, Weisheng Wang, Chun Liu
PO012	0289	Stator Current Vector Control Strategy of Doubly-fed Induction Generator Using Proportional Resonant Regulators	Q Li, P Cheng, X J Hao, J P Zhang
PO013	0299	Low voltage ride through capability enhancement of grid-connected permanent magnet synchronous generator driven by a variable speed wind turbine: a review	Mohammed Qais, Hany Hasanien, Saad Alghuwainem
PO014	0300	Output power smoothing of grid-connected permanent magnet synchronous generator driven by a variable speed wind turbine: a review	Mohammed Qais, Hany Hasanien, Saad Alghuwainem
PO015	0307	A Method of Eliminating High Frequency Resonance of DFIG System Connected to Weak Grid	B Pang, H Nian, G D Xu, J X Qiu

<b>PO016</b>	<b>0338</b>	The control for Offshore Wind Power Integration Based on Modular Multilevel Converter	C Lv, N L Tai
<b>PO017</b>	<b>0343</b>	Research on VSC-HVDC control strategy based on large offshore wind power system	Q Sun, C J Fan, C Lv, L Y Qiao
<b>PO018</b>	<b>0399</b>	Study on the Stability of Grid - Connected System of Two Types of Wind Turbines with UPFC	Haitao Liu, Xu Li, Gaofeng Qin, Sipeng Hao
<b>PO019</b>	<b>0417</b>	Study on Compound Frequency Modulation Strategy of DFIG-Based Wind Turbines Dealing With Stator Winding Inter-turn Short Circuit Fault	Liling Sun, Lanqing Hu, Boqiang Xu

## Session B

<b>PO020</b>	<b>0157</b>	Modelling and Simulation of the Photovoltaic Power Station Considering the LVRT and HVRT	Shichao Fan, Pupu Chao, Feifei Zhang
<b>PO021</b>	<b>0335</b>	Research on the Smart Modular Cascaded Solid State Transformer interfaced to Distributed Photovoltaic Power Generation System	Hengyang Zhao, Taiyun Zhu, Dengfeng Cheng, Binbin Li, Jinjin Ding, Yuanzhi Li
<b>PO022</b>	<b>0358</b>	A Multilevel Switch-capacitor DC-DC Converter: Variable Voltage Gain Optimization Issues	S R Wang, K P Liu, L Qing, D Liu
<b>PO023</b>	<b>0432</b>	Active Power Control Algorithm for Photovoltaic System Based on Operating Efficiency of Photovoltaic Generation Unit	rui bi, xianfang liu
<b>PO024</b>	<b>0521</b>	Study on Photovoltaic Grid-connection Composite Control Strategy in Microgrid	Shuangjian PENG, Xin XUN, Kai SHENG, Xiaoxing ZHU, Fuping LIU, Zhijie WANG
<b>PO025</b>	<b>0648</b>	Research on low voltage ride through control based on model predictive control	Jianhu Yuan, Yu Chen, Nan Chen, Yunlong Zhang, Yuliang Lin
<b>PO026</b>	<b>0660</b>	Based on STATCOM Direct Current Full-order Terminal Sliding Mode Control	Xuemei Zheng, Ruobo Chen
<b>PO027</b>	<b>0718</b>	Whale Optimization Algorithm for Photovoltaic Model Identification.	O S Elazab, H M Hasaniien, M A Elgendy, A M Abdeen
<b>PO028</b>	<b>0737</b>	Reliability Evaluation of Photovoltaic Power Generation Systems with Consideration of Time-Varying Factors	Hongtao Li, Jie Ding, Jingsheng Huang, Yinghua Dong, Xiaoyan Li
<b>PO029</b>	<b>0810</b>	Fault Diagnosis of PV Array Based on Optimized BP Neural Network by Improved Adaptive Genetic Algorithm	Y Liu, X Zhu, J Yang
<b>PO030</b>	<b>0827</b>	Development Status and Demand Analysis of IEC Photovoltaic Standards	Zhen Li, Xiaodi Qin, Chenhui Niu, Zhilei Chen

<b>PO031</b>	<b>0835</b>	Weather Type Partition Method Considering Sequential Features in Photovoltaic Forecasting	H Li, Z X Lu, Y Qiao, N B Wang, K Ding
<b>PO032</b>	<b>0892</b>	A one-step MPPT method based on 5-parameter model of PV module	J R Miao, D Xie, R X Fan
<b>PO033</b>	<b>0917</b>	Short-term power forecasting of distributed pv power systems for consideration its effect on load forecasting	Yu Liu, Zhi Li, Kai Bai, zhaoguang zhang, Xining Lu, Xiaomeng Zhang
<b>PO034</b>	<b>0932</b>	Utilization of photovoltaic systems for reactive power compensation in low voltage power systems	M Uğur, E Duymaz, M Göl, O Keysan

## Session D

<b>PO035</b>	<b>0043</b>	Research of Reactive Power Control Strategy to Reduce the Reactive Power Exchange of AC&DC Power Grid	Renchuan Tu, chenggong Zhao, zhijun Liu, yong Cui, wei Xie, desheng Zhou, kaiyu Zhang
<b>PO036</b>	<b>0052</b>	Distribution Fault Outage Cost Evaluation and Hotspot Area Recognition Based on Big Data	Jinming CHEN, Yi YANG, Ziying WANG, Yan Li, Yajuan GUO, Jinli CUI, Daohua ZHU
<b>PO037</b>	<b>0099</b>	Protection Principle for MMC-HVDC DC Lines Based on Boundary Signals	C Lv, N L Tai, X D Zheng
<b>PO038</b>	<b>0100</b>	A Hierarchical Control Strategy Based on Bidding Mechanism in Active Distribution Network	Jiawei Zhou, Bingxing Yue, Jinrong Wu, Hua Huang, Chunliu Wang
<b>PO039</b>	<b>0102</b>	Synergistic Dispatch of Generation and Network in Wind Power Integrated Power System	Donglei Sun, Jinhong Yang, Xiaoming Liu, Kuihua Wu, Xiangyang Cao, Qibin Bo
<b>PO040</b>	<b>0115</b>	Coordination of Two-stage Surge Protective Device in Low Voltage System under Mixed Waves	Yiming ZHENG, Chunyan GONG, Wei HU, Zhengyuan ZHU
<b>PO041</b>	<b>0116</b>	Research of Transmission delay test-method in Smart Substations	Gong Xinyue, Zhou Da, Teng Yun, Bu Qiangsheng, Gao Lei
<b>PO042</b>	<b>0117</b>	An equivalencing-tracking-based method for incorporating distributed energy resources in transmission system economic dispatch	Z S Li, Q L Guo, H B Sun, T Xu
<b>PO043</b>	<b>0119</b>	Abnormality in Power System Transient Stability Control of BESS/STATCOM	Jun Liu, Can Su, Xu Wang, Wanliang Fang, Shuanbao Niu, Ping Wei
<b>PO044</b>	<b>0129</b>	Pre-synchronization Control Method of Virtual Synchronous Generator with Alterable Inertia	P X Xing, L J Fu, G Wang, Y Wang, Y Wu
<b>PO045</b>	<b>0134</b>	Dynamic modelling of the VSC -HVDC for analytical studies	G B Song, T Wang, X H Huang, Y B Gu, Y K Liu

<b>PO046</b>	<b>0135</b>	A Two-Phase Integrated Optimization Strategy for Network Restoration with Photovoltaic Generation	Z Q Jiang, F Xiao, Q Ai, Q L He, Q S
<b>PO047</b>	<b>0137</b>	Study on the Dynamic Stability of Weak Grid Connection of Large-scale DFIG Based Wind Turbines	Xinshou Tian, Haiyan Tang, Yan Li, Yongning Chi, Yuanyuan Shu
<b>PO048</b>	<b>0138</b>	Multi-rate Electromagnetic Transient Simulation of Large Scale Power System Based on Multicore	Peng zhan, Shu-jun Yao, Hai-lin Zhang, Shuo Zhang
<b>PO049</b>	<b>0139</b>	Study on HVDC Transient Reactive Power Characteristics during Commutation Failure and Impact of HVDC Control Parameters	Jingzhe Tu, Yan Pan, Jian Zhang, Bing Zeng, Junchuan Jia, Jun Yi
<b>PO050</b>	<b>0141</b>	A Siloxane Injection Technology for Extending the Lifetime of the Operating Cable	Tao Wenbiao, Song Shuyong, Ma Zhenguo, Sun Ruihao, Zhang Yifan, Zhao Jin
<b>PO051</b>	<b>0144</b>	Research on A New Scheme of LCC-HVDC Line Protection	G B Song, Y B Gu, X H Huang, T Wang, W Huang
<b>PO052</b>	<b>0149</b>	Increasing the maximum penetration of distributed energy resource on the basis of multi-dimensional multi-resolution model	Shanshan Zhao, Xiaohui Song, Yajie Li, Fei Gao, Jianfang Li, Yu Zhang
<b>PO053</b>	<b>0163</b>	Research on Technical Scheme of Outdoor-Layout/Miniaturization Relay Protection in Smart Substation	Shuang Song, Xingjin Qiao, Qiangsheng Bu
<b>PO054</b>	<b>0169</b>	Optimal single phase smart meter design	N. T. Mbungu, R. C. Bansal, R. Naidoo, M Bipath
<b>PO106</b>	<b>0170</b>	Frequency Characteristics of East China Power Grid after Bipolar Locking of UHVDC	X L WU, Q LAN, Z W LI, K Q ZHUANG, Y C MIAO, W LI
<b>PO107</b>	<b>0178</b>	High accurate estimation method of subsynchronous and super-synchronous harmonic parameters on PMU	Y Tan, R Chen, M Wang, M Wang, M G Hou
<b>PO108</b>	<b>0192</b>	Study of online electromechanical and electromagnetic hybrid simulation system	Dongyu Shi, Xujiang Chen, Yalou Li, Feng Wang, Dechao Xu, Chunjiang He, Gang Li
<b>PO109</b>	<b>0199</b>	Comparing smart EV charging strategies from different stakeholder's perception	T Rawat, K R Niazi
<b>PO110</b>	<b>0204</b>	New Look-up Table Approaches for TCSC Impedance Control Considering Thyristor Conduction Characteristic	Yi Yang, Xiaojun Zhu, Wei Yao, Lei Gao, Yubo Yuan
<b>PO111</b>	<b>0214</b>	Optimal Reconfiguration of the Active Distribution Network with Distributed Generation and Electric Vehicle	Dongfang Zhang, Tao Zhang, Xueqin Xu, Yuanhua Zhou, Xiaolin Zhang
<b>PO112</b>	<b>0221</b>	Improvement of HVDC Commutation Failure Response Based on Compound Phase-shifting Control	S Wang, S Lu, Y Hou, F Liu, Z Xu

<b>PO113</b>	<b>0222</b>	Suppression Method and Effectiveness of STATCOM for Identical Multi-machine System	S Wang, S Lu, H Xiao, Z Xu, X Cui, X Wu
<b>PO114</b>	<b>0228</b>	Protection of Microgrid Systems: A Comprehensive Survey	Xiaoning Kang, Carl Eli Kwakutse Nuworklo, Browh Serge Tekpeti, Mostafa Kheshti
<b>PO115</b>	<b>0241</b>	Multi-objective combined dispatch model of wind power accommodation based on thermoelectric unit with heat storage device and electric boiler	Xiaodan Wang, Hong Li
<b>PO116</b>	<b>0245</b>	Analysis of pole-to-pole Fault Characteristics of Flexible DC System and Design of Current Limiting Device	Yan Xu, Jingyan Liu
<b>PO117</b>	<b>0263</b>	Research on Probabilistic Optimal Power Flow of Distribution System with Multilayer Structure Based on Energy Router	Weijie DONG, Lijuan HU, Wanxing SHENG, Keyan LIU, Xiaoli MENG, Pan DENG
<b>PO118</b>	<b>0281</b>	A method to determine spinning reserve requirement for a grid with large scale wind power penetration	J T Liu, S H Feng, K Wang, X R Guo, L Z Xu
<b>PO119</b>	<b>0286</b>	Wind energy prediction with LS-SVM based on Lorenz perturbation	Yagang Zhang, Penghui Wang, Chenhong Zhang, Shuang Lei
<b>PO120</b>	<b>0306</b>	Collaborative Control Strategy of Power Electronic Transformer and Fault Current Limiter in DC Microgrid	L Kong, H Nian
<b>PO121</b>	<b>0316</b>	Study on the Large Power Shortage Island Self-healing Method of Smart Distribution Network Based on Status of Protection	Bao You-li, Xu Pei-dong
<b>PO122</b>	<b>0317</b>	Capacity Credit of Renewable Distributed Generation in Distribution Generation Systems Considering the Impact of Demand Response	B Zeng, X Wei, J Feng, Z Liu
<b>PO123</b>	<b>0325</b>	Load Frequency Control in Multiple Microgrids Based on Model Predictive Control with Communication Delay	X Wang, Q Zhao, B He, Y Wang, J Yang, Q Zhou
<b>PO124</b>	<b>0329</b>	Locating Optimal Support Generation Units Based on Polynomial Approximation of Post-contingency Static Stability and Security Region Boundaries	Y Qiu, Z Luo, B Chen, Q Zhao, B Xia, H Wu, Y Song
<b>PO125</b>	<b>0332</b>	Identification of Vulnerable Lines in Large Power Grid Based on FP-growth Algorithm.	Shengbo Jiang, Xueli Pan, Yi Xiao, Qiangming Zhou, Miao Li, Jun Yang
<b>PO126</b>	<b>0333</b>	Planning of Electric Vehicle Charging Station Based on Queuing Theory	Jie Zhu, Yixin Li, Jun Yang, Xianglong Li, Shuang Zeng, Yanxie Chen
<b>PO127</b>	<b>0337</b>	Optimal scheduling of power system with photovoltaic power supply considering regional carbon trading	ZHANG Wei, SUN Po
<b>PO128</b>	<b>0341</b>	Accurate fault location of complex distribution network with distributed generators	W J Li, C X Guo, Y Jin, X Gong

<b>PO129</b>	<b>0350</b>	The Method of Calculating the Maximum Transmission Capability with Unified Power Flow Controller	Jiankun Liu, Ningyu Zhang, Xinyao Zhu, Ke Xu, Zhe Chen
<b>PO130</b>	<b>0363</b>	A PPSO METHOD FOR DISTRIBUTION NETWORK RECONFIGURATION CONSIDERING THE STOCHASTIC UNCERTAINTY OF WT, PV AND LOAD	Huayi Wu, Ping Dong
<b>PO131</b>	<b>0368</b>	Capacity configuration optimization for stand-alone microgrid based on an improved binary bat algorithm	Siqing Sheng, Jingjing Zhang
<b>PO132</b>	<b>0370</b>	Research on DC Infeed Ratio of Receiving Grids with Renewable Energy under Frequency Stability Constraint	Yingchun Qian, Dajun Si, Facai Xing, Huanfeng Dong, Mingyuan Guan, Zheng Xu
<b>PO133</b>	<b>0382</b>	Emulating the features of conventional generator with virtual generator technology: an overview	Xiangping Kong, Jingjuan Pan, Xinyue Gong, Peng Li
<b>PO134</b>	<b>0409</b>	A method of adapting to grid recovery in extreme weather conditions	Gang Luo, Chongru Liu, Yinguo Yang, Feng Qian, Qingang Duan, Yunhao Zhao
<b>PO135</b>	<b>0410</b>	Study on Harmonic Transfer Characteristics of MMC-HVDC Systems	Li rong, Wen jun, Liu ruoxi, Yan han, Cui kangsheng
<b>PO136</b>	<b>0413</b>	A Three-Phase Dynamic Phasor Model of HVDC Systems	Gang Luo, Chongru Liu, Feng Qian, Yinguo Yang, Junlei Liu, Yunhao Zhao, Wei Xu
<b>PO137</b>	<b>0423</b>	Modelling of Multi Wind Farms Output Correlation Based on Copula Theory	Yang Pan, Libao Shi, Yixin Ni
<b>PO138</b>	<b>0440</b>	A traveling-wave-based method for fault location in multi-terminal DC networks	Q Z Lin, G M Luo, J H He
<b>PO139</b>	<b>0443</b>	Research on penetration of distributed generation considering fluctuation and load frequency characteristics	Jianfang LI, Xiaohui Song, Fei Gao, Shanshan Zhao, Yu Zhang
<b>PO140</b>	<b>0453</b>	Design of a novel voltage regulating distribution transformer with a power electronic assisted booster system	Guiyang Jin, Keji Yang, Jun Liu
<b>PO141</b>	<b>0483</b>	A New Adaptive Voltage Protection Scheme for Distribution Network with Distributed Generations	DS Wang, SL Zhao, S Zhang, SZ Song, J Ma, WB Zhang
<b>PO142</b>	<b>0484</b>	A bilateral collaborative operation optimization model in integrated multi-energy system	Yueqiao Li, ChunXiao Wei, DaPeng Guo, WenXia Liu, XingLiang Chen
<b>PO143</b>	<b>0500</b>	An improved modulation method of modular multilevel converter	P Qiu, F Xu, Y Lu, J H Li, G R Liu, H Q Xiao, S J Wang, Z Xu
<b>PO144</b>	<b>0508</b>	Air Conditioner Fast Dispatching Model Based on Load Aggregator and Direct Load Control	X W Wang, Y F Gong

<b>PO145</b>	<b>0517</b>	Application of MMC-UPFC in the 500kV Power Grid of Suzhou	Peng Li, Yiyu Wang, Changyou Feng, Jinjiao Lin
<b>PO146</b>	<b>0535</b>	A scheme to improve the load characteristics in dc distribution networks based on optimal allocation of energy storage systems	G B Song, X H Huang, T Wang, Y B Gu
<b>PO147</b>	<b>0536</b>	Employing Electric Vehicles for Reactive Power Compensation in Distribution Network	YZ Huang, K Zhang
<b>PO191</b>	<b>1000</b>	Study of Demand Response Measures and Its Quantitative Effects in Promoting Renewable Energy Accommodation in High Proportional Renewable Energy Scenario	LI Xiaofei, HUANG Yuehui, YANG Shuo

### Invited Sessions

<b>PO055</b>	<b>0107</b>	Cross Coupling over Frequency and Sequence in Impedance Modeling of Grid-Connected Inverter	Y Y Xu, H Nian, G D Xu, J X Qiu
<b>PO056</b>	<b>0229</b>	A Prediction Method of PV Output Power Based on Cloud Model	Zhong Chen, Songyang Che, Yan Xu, Dapeng Yin
<b>PO057</b>	<b>0324</b>	A Representational Learning Approach for Power System Transient Stability Assessment Based on Convolutional Neural Network	Bendong Tan, Jun Yang, Xueli Pan, Jun Li, Peiyuan Xie, Ciling Zeng
<b>PO058</b>	<b>0392</b>	Robust Optimization for AC-DC Power Flow Based on Second-Order Cone Programming	Y Zhou, Y Tian, K Y Wang, M Ghandhari
<b>PO059</b>	<b>0463</b>	Research on Transformer Winding for Deformation Fault Diagnosis Based on K-fault Diagnosis Method	J J Lin, H Z Chen, X Y Gao
<b>PO060</b>	<b>0530</b>	An Analysis Method of Feeder Partition Capacity Considering Power Supply Security and Distributed Generation	W F Wang, Z J Cao, K .Sun, D He, Y J Sun, C X Li, M Sun, S F Dong
<b>PO061</b>	<b>0717</b>	Bifurcation Analysis of The Islanded Microgrid with Constant Power Loads	Yifan Hu, Yelun Peng, Zhikang Shuai
<b>PO062</b>	<b>0770</b>	Controllable Powers Range and Control Method of DFIG for Transient Stability of Power System	D Zheng, J Ouyang, X Xiong
<b>PO063</b>	<b>0818</b>	Equivalent modelling of wind farm for small signal stability analysis in weak power system	X He, H Geng, G Yang, X Zou, Y Li
<b>PO064</b>	<b>0828</b>	Cooperative games based method to determine the weights of load forecasting solution incorporated with various algorithms	VietCuong Ngo, Wenchuan Wu, Yi Yang, Boming Zhang
<b>PO065</b>	<b>0859</b>	The control of grid connected converter based on model prediction control under unbalanced grid voltage	Lifan Niu, Zhen Xie, Hui Yang, Xing Zhang

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Session A

PO066	0498	Research on Five-phase Induction Motor System Control with Third Harmonic Current Injection	Zhu Peng, Qiao Mingzhong, Wei Yongqing, Xia Yihui
PO067	0529	Study on fault characteristics of full power inverted sources and its short-circuit current calculation model.	C Zhang, J Zeng, W Zhao, G Zhong, W Zhang, W Li, M Dai
PO068	0564	Design and research of modular permanent magnet DC generator based on magnetic integrated transformer for offshore wind farms	Kuigang Shen, Baochang Xie, Xu Cai
PO069	0591	Study of Wind Power Fluctuation Characteristics of Three North Regions based on Clustering Algorithm	SHUO YANG, CHI LI, XIAOFEI LI, YUEHUI HUANG, CHUN LIU, WEISHENG WANG
PO070	0612	Design and Multi-Object Optimization of Axial Flux Interior PMSM for EV and HEV Applications	Q X Chen, D L Liang, Y B Liu, Q S Wang
PO071	0664	Modeling of Multi VSCs in DC-Link Voltage Control Timescale for Small Signal Stability Analysis	Yunhui Huang, Binyu Xiong, Aihong Tang, Haiyan Tang, Yan Li, Yong Huang
PO072	0669	Modeling of wind speed correlation based on entropy weighted fuzzy comprehensive evaluation	Xu Y, Liu D, Zhang Y
PO073	0681	Research on Variable Pitch Control Strategy of Wind Turbine for Tower Vibration Reduction	Yanhui Qiao, Shuang Han, Ying Deng, Yongqian Liu, Jian Dong, Lei Pan, RunXiang Li, Bin Zhao
PO074	0683	Clustering Based Optimization for Maximum Wind Energy Extracting of Large Scale Wind Farm	Shaokang Ma, Hua Geng, Geng Yang, Jiangbei Xi
PO075	0687	Reactive Power Optimization of Distribution Network with Dispersed Wind Farm	Bing Xue, Jiandong Duan, Lupeng Chen
PO076	0746	Analysis of short circuit characteristic of hybrid wind farm group based on artificial short circuit test	Peng Zhao, Jia Jing, Ruiqi Wang, Fengkui Luan, Peng Yu, Xianqiao Zhao, Guanglei Li
PO077	0819	Build-up Steady-State Analysis of Wind-Driven Self-Excited Induction Generators	H Li, L Chen, X Zheng, Y Luo, X Peng
PO078	0829	Research on Application of Superconducting Fault Current Limiter in MMC-MTDC	C Lv, N L Tai, Z J Jin, X D Zheng
PO079	0882	Optimisation of Offshore Wind Farm Collection Systems Based on Modified Genetic Algorithm	Yujing Zhang, Zongxiang Lu, Ying Qiao, Wentao Sun

<b>PO080</b>	<b>0885</b>	A Multi-objective Reactive Power Optimization Approach for the Isolated Grid of New Energy Clusters Connected to VSC-HVDC	S L Yin, L L Wu, W Song, X Wang
<b>PO081</b>	<b>0904</b>	Suppression method of parallel damping controller for DFIG	F. Zhao, L.L. Wu, J.A. Zhang, X.D. Gao, H. Liu, H.J. Wang, Y.J. Yang
<b>PO082</b>	<b>0936</b>	AC and DC fault ride through of hybrid MMC integrating wind power	Shuai Cao, Wang Xiang, Liangzhong Yao, Bo Yang, Jinyu Wen
<b>PO083</b>	<b>0956</b>	Experimental Analysis of Noise and Vibration for Large Brushless Doubly Fed Machines (BDFMs)	Salman Abdi Jalebi, Danilo Llano, Ehsan Abdi Jalebi, Paul Malliband, Richard McMahan

## Session C

<b>PO084</b>	<b>0105</b>	Research on Self-starting Strategy of Variable Speed Pumped Storage Units based on Model Predictive Control	L JI, Y SHAO, J SUN, L SHI
<b>PO085</b>	<b>0130</b>	Power grid planning Based on Differential Abandoned Wind Rate	Z R Song, F Shen, Z Nan, Y B Zhang, L Zhao, X Y Deng, N Zhang, H Li, Z X Zhang, Y Wang, T Q Lu
<b>PO086</b>	<b>0131</b>	Control Strategy for the parallel-powered system	qian chen, peng qiu, jiayi wu, yi lu, kai tong, jiazhuo xuan, feng xu, xiaoming huang, haihong yu
<b>PO087</b>	<b>0152</b>	AC Excitation Control Strategy of Variable Speed Pumped Storage Units based on Active Disturbance Rejection Control	L Ji, J Sun, M Zhou, W Tian
<b>PO088</b>	<b>0224</b>	Optimal configuration of energy storage system based on frequency hierarchical control in ship power system with solar photovoltaic plant	Jinrui Tang, Binyu Xiong, Yunhui Huang, Chengqing Yuan, Guoxing Su
<b>PO089</b>	<b>0233</b>	Research on Seamless Switching Control Strategy for T-Type Three-Level Energy Storage Inverter Based on Virtual Synchronous Generator	Dan Zhang, JianGuo Jiang, Liang Zhang, BaoNan Wang, Zhongzheng Zhou, HongLiang Li
<b>PO090</b>	<b>0251</b>	Comprehensive Recourse Strategic Planning for the Integration of Variable Renewable Electricity	Xiao PAN, WenJuan LIU, YuFei JIN, XinYang DENG
<b>PO091</b>	<b>0252</b>	An Advanced Microgrid and Its Multi-objective Regulation Strategy For Shore Supply	Moduo Yu, Wentao Huang, Nengling Tai, Xiaodong Zheng, Zhoujun Ma, Yong Wang
<b>PO092</b>	<b>0283</b>	Evaluation the capacity of Power and energy balance for Cascaded H-Bridge Multilevel Inverter using different PWM Techniques	Abuzaid Saeed Gadalla, Xiangwu Yan, Sara Yahia Altahir, Hashim Hasabelrasul
<b>PO093</b>	<b>0339</b>	OPTIMAL ACCOMMODATION AND MANAGEMENT OF HIGHRENEWABLE PENETRATION IN DISTRIBUTION SYSTEMS	Nand K. Meena, Anil Swarnkar, Nikhil Gupta, K. R. Niazi
<b>PO094</b>	<b>0501</b>	Model Predictive Control Considering Scenario Optimization for Microgrid Dispatching with Wind Power and Electric Vehicle	Xiaogang Guo, Zhejing Bao, Hongji Lai, Wenjun Yan
<b>PO095</b>	<b>0552</b>	An Energy Management Strategy for Microgrids Including Heat Pump Air-conditioning and Hybrid Energy Storage Systems	Jinxiao Shi, Wentao Huang, Nengling Tai, Peng Qiu, Yi Lu
<b>PO096</b>	<b>0691</b>	A Modified Elephant Herding Optimization for Economic Generation Co-ordination of DERs and BESS in Grid	Sonam Parashar, Anil Swarnkar, Nikhil Gupta, K R Niazi

		Connected Microgrid	
<b>PO097</b>	<b>0719</b>	A Hybrid Cooperative Control Method for Microgrid with Large Generation or Load Fluctuations	Q Lv, G Yang, H Geng, X B Zhang
<b>PO098</b>	<b>0728</b>	Accuracy Improvement of Remaining Capacity Estimation for Energy Storage Batteries	Cheng Xu, Guo'an Liu, Kangli Wang
<b>PO099</b>	<b>0734</b>	Research on Smart Tracking Strategy of Wind Power and Energy Storage Combined Generation System based on Three Stage Rolling Optimization	Linlin Wu, Hui Liu, Kai Bai
<b>PO0100</b>	<b>0753</b>	Comparison of Centralised and Distributed Battery Energy Storage Systems in LV Distribution Networks on Operational Optimisation and Financial Benefits	Zhi Qiao, Jin Yang
<b>PO0101</b>	<b>0790</b>	Output Characteristics of LCC-S Compensation Network and Its Optimal Parameters Design in IPT System	Bo Li, Jiang-Hua Lu, Wen-Jing Li, Jin Wang, Guo-Rong Zhu, G Ranjith Kumar
<b>PO0102</b>	<b>0815</b>	An Improved Power Allocation Strategy of Hybrid Energy Storage System in DC Micro-Grids	Xiaoyong Chang, Fufeng Chen, Yuping Li, Yuting Wang, Chengji Xu
<b>PO0103</b>	<b>0836</b>	Coordinated Operation Strategy of Hybrid Storage System in Wind Power Peak Shaving Scenarios	Jun Wu, Ying Qiao, Zongxiang Lu, Wenqi Li, Liang Sun
<b>PO0104</b>	<b>0952</b>	Modeling and Control of Doubly-Fed Variable-Speed Pumped Storage Units for Grid Power Regulation	Guopeng ZHAO, Qiang ZHAO, Jiyun REN, Xiaofang SONG, Minxiao HAN
<b>PO0105</b>	<b>0953</b>	Power Requirement and Control Characteristics of Energy Storage Equipment in Microgrid operating in Island Mode	Guopeng ZHAO, Xinwei ZHOU

## Session D

PO148	<b>0544</b>	Coordination Sharing Voltage Control Strategy of High Voltage DC Power Supply With Multiple Modules	Junpeng Ji, Xingxia Zhang, Jingang Li, Hanqing Zhao, Bo Qin
PO149	<b>0545</b>	A dispatching approach for active distribution network considering PV generation reliability and load predicting interval	Yiqiang Ying, Yingjun Wu, Yiqiang Su, Rong Fu, Xinyi Liang, Hao Xu
PO150	<b>0547</b>	Situation awareness of power system based on static voltage security region	Fei Xiao, Ziqing Jiang, Qian Ai, Ran Hao
PO151	<b>0548</b>	A Strategy to Smooth Tie-line Power of Microgrid by Considering Group Control of Heat Pumps	Jinxiao Shi, Wentao Huang, Nengling Tai, Qin Zhu, Dawei Liu
PO152	<b>0554</b>	Research on Small-signal Stability of Hybrid Multi-terminal HVDC System and Control System Parameter Design	Zhang Hailin, Yao Shujun, Zhan Peng
PO153	<b>0559</b>	Fault Recovery for Distribution Network with Distributed Generation	Wei Ba, Yuming Yan, Kangda Wang, Bingqing Wu, Zhenghong Chen, Xueying Wang
PO154	<b>0563</b>	Control Strategy For Wind Power Integration Base on Energy Demand Respond and Distributed Energy Storage	Xu YAN, Xiqiao LIN, Lijuan QIN, Shuai HAN, Like GAO, Yiyun YANG, Bo ZENG
PO155	<b>0566</b>	A Decentralized Method for Solving Multi-area Stochastic Dynamic Economic Dispatch Problem	W M Zhao, B R Zhou, M B Liu, W F Yao, S Y Lu, T Wang

PO156	<b>0575</b>	Maximising wind generation through optimised operation of on-load tap changing (OLTC) transformers in active distribution networks	D Danzerl, S Gill, O A Lara
PO157	<b>0608</b>	Research on the Demand Response Strategy of the Electricity Deviation Assessment	Sibo Song, Hongxia Guo, Ping Yang, Zhirong Xu, Ting He, Zhilin Lu
PO158	<b>0613</b>	The architecture and security protection scheme for the distributed new energy public service platform with hybrid cloud system	Daohua Zhu, Yajuan Guo, Jinming Chen, Yan Li, Haitao Jiang
PO159	<b>0614</b>	Study on System Commissioning Test and project application of Lingzhou to Shaoxing UHVDC Transmission Project	Wankai YANG
PO160	<b>0622</b>	Research on DC-Link Voltage Stabilizer for voltage source convertor as Connected to Weak Grid	Yunhui Huang, Jinrui Tang, Guorong Zhu, Haiyan Tang, Yan Li
PO161	<b>0631</b>	Research on user optimal aggregation based on demand response potential spectrum clustering analysis	Yanping Sun, Yajing Gao, Wenhai Yang, Jingmin Wang, Hong Li
PO162	<b>0635</b>	Impact of fault-ride-through strategy on dynamic characteristics of photovoltaic power plant	L M Ge, L N Qu, L Z Zhu, N Chen, L Zhang
PO163	<b>0652</b>	DC Statcom in Multi-terminal DC Distribution Power System	D Chen, L Xu, Y Xu
PO164	<b>0662</b>	Distribution Network Reliability Investment Effectiveness Evaluation Based on Defect Data Mining	Keyan LIU, Yangtao Liu, Lijuan HU, Songhuai Du, Juan Su
PO165	<b>0668</b>	A Partial discharge of White Noise Suppression Method Based on EEMD And Higher Order Statistics	Wei Wang
PO166	<b>0674</b>	A Novel Generation Method for the PV Power Time Series Combining the Decomposition Technique and Markov Chain Theory	Shenzhi Xu, Xiaomeng Ai, Jiakun Fang, Jinyu Wen, Pai Li, Yuehui Huang
PO167	<b>0682</b>	Research on DC Voltage Class Series with AHP	R Li, L J Sun, H Zhang, C Y Yao, G M Luo
PO168	<b>0692</b>	Optimal demand response aiming at enhancing the economy of high wind power penetration system	Xiao Zhou, Jing Shi, Kang Gong
PO169	<b>0693</b>	Optimal selection of joint impoundment schemes of Xiluodu-Xiangjiaba-Three Gorges cascade reservoirs at the end of flood season	L Jun, Y Hongjie, W Jiajie, Y Xiaoran, J Changming
PO170	<b>0713</b>	DG Integration Capacity Analysis Under Harmonic Constraints	Fei Gao, Xiaohui Song, Jianfang Li, Yu Zhang, Weiqing Ma, Huiming Zhang
PO171	<b>0759</b>	Fast Optimal Power Allocation Algorithm for Multi-Terminal AC/DC Hybrid Grids With Wind Power Integration	X Guo, Y Qiao, Z Lu, L Wu, M Xu

PO172	<b>0763</b>	Bidding Strategy of Electricity Market Considering Network Constraint in New Electricity Improvement Environment	Xiaojie Zhou, Yajing Gao, Wenhai Yang, ShiXiao Guo, Yanping Sun
PO173	<b>0784</b>	Research on AC transmission line fault ride-through control strategy of MMC based unified power flow controller	J Q Tang, H Ma, X M Yang, X H Liu, X W Wang, J L Wu
PO174	<b>0795</b>	An Improved Extreme-Scenario Method for the Economic Dispatch of Active Distribution Networks	Yipu Zhang, Xiaomeng Ai, Jiakun Fang, Jinyu Wen
PO175	<b>0799</b>	THE EXPLORATION OF A DC WIND FARM INTEGRATED BY VARIABLE SPEED SCIGS	Fu Jianfeng, Song Guobing, Gong Yu
PO176	<b>0812</b>	Optimization and Dispatching strategy of Dynamic Reactive Power in Distribution Network with Distributed Generators	Chun Wang, Li Xiang, Zhenli Deng, Zhifeng Liang
PO177	<b>0813</b>	Impact Analysis of DFIG Location on Low Frequency Oscillations in Power System	A K Gupta, K Verma, K R Niazi
PO178	<b>0830</b>	Analysis Method and Empirical Research on Economic Benefit of Large Scale Consumptive Power Grid Investment	Yi Ge, Yue He, Xiaoyan Hu, Wentao Sun, Wenjia Zhang, Junhui Huang
PO179	<b>0839</b>	Optimal strategy of reactive in distribution network based on GA enhanced trust-tech technology	Wu Kuihua, Wang Jian, Yang Bo, Feng Liang, Chen Lu, Zhang Xiaolei, Wang Fei
PO180	<b>0874</b>	Coordinated control strategy of reactive power for large-scale wind power transmission by LCC-HVDC links	Z B Wang, Y Xu, X T Wang
PO181	<b>0879</b>	Identification on current transformer saturation based on the improved gradient mathematical morphology method	Jian-dong Duan, Yang Lei, Hao Li
PO182	<b>0883</b>	HARMONIC SUPPRESSING CONTROL STRATEGY FOR MMC-HVDC	Duan Ruimin, Cui Kangsheng, Wen Jun, Li Rong, Yan Han, Zhao Xiaobin
PO183	<b>0886</b>	On-line decentralized economical dispatch for power system with highly-penetrated uncertain renewables	S W Xia, W W Zou, Q Zhang, G Y Li
PO184	<b>0894</b>	Harmonic Influence of Traction Locomotive on Hybrid DC Asynchronous Interconnection Project	Shuying Guo, Minxiao Han, Ruoxi Liu, Jun Wen
PO185	<b>0895</b>	Analysis of the Impact of Distributed Generation on Grounding Method of Distribution Network	JUN LU, QIAN WANG, JIANDONG DUAN, WANGJING TAN
PO186	<b>0897</b>	Study on tolerance capability of converter-typed load for voltage fluctuation in system planning	Fang Zhao, Zhaobin Du, Wenqian Zhang, Baorong Zhou
PO187	<b>0925</b>	Uncertainty Model of Renewable Energy Sources	Zongjie Wang, Zhizhong Guo

PO188	0945	A discussion of positive fraction vector fitting for frequency dependent network equivalents	Yizhong Hu, Wenchuan Wu, Boming Zhang, Xujiang Chen
PO189	0947	Reactive power optimal design and fault ride through of MMC-PLUS	Zhihan Yang, Wang Xiang, Liangzhong Yao, Zhibing Wang, Jinyu Wen
PO190	0948	Influence of back-to-back VSC-HVDC project on the operation characteristics of Hubei power grid	D F Cai, K P Zhou, W N Wang, H G Liu, K Cao, Y Wang

## Session E&F

PO192	0054	Modeling and Control of fuel Supply System of Hydrogen/Oxygen Fuel Cells	Zhiping Cheng, Peng Ren, Yali Xu, Hannian Zhang
PO193	0127	Thermal management system of a water-cooled proton exchange membrane fuel cell	Z Niu, L He, Y X Liu, Y J Zhang, W R Chen
PO194	0158	Research on Scheduling Optimization for an Integrated System of Wind-Photovoltaic-Hydro-Pumped Storage	Q W Zhang, X L Wang, T T Yang, J K Liang
PO195	0176	Models for Microbial Fuel Cells: A Critical Review	C S Xia, D X Zhang, Y M Zhu, Y X Guo
PO196	0200	New type of ocean energy comprehensive utilization system of water-electricity cogeneration	wan jun wang, Fuyuan wang, xiangyu li, yongqiang zhu, ruihua xia
PO197	0202	Research on Market Bidding Mechanism of Generation Rights Trade for Promoting New Energy Consumption	Bike XUE, Tianxing Qi, Wei ZHANG, Yan Li, Xiuli WANG
PO198	0259	Selective Harmonic Suppression Strategy by SAPF in Power Distribution System	Cong Liu, Ke Dai, Xinwen Chen, Yuqing He, Pingjiang Lu
PO199	0282	A Bi-level Planning Model for Optimal Allocation of WT-PV-ESS in Distribution Networks	Yuan Liu, Jun Yang, Xu Zhu, Yang Wang, Bo He, Jie Zhu, Yanxia Chen
PO200	0742	Decomposition- combination model with parallel computation and its application for optimal operation of cascade power stations	Pei Zhang, Changming Ji, Yanke Zhang, Hhongjie Yu, Pu Zhang
PO201	0743	Long -Term Reliability Evaluation for Small Hydro-Power Generations based on Flow Runoff Theory	L Chen, Y Ding, H Li, G Jin
PO202	0796	Coupling Analysis of Gas - Electric Hybrid System Based on Newton-Raphson method	Xiangyang Men, Zesen Wang, Jun Cao, Xin Pan

## Invited sessions

<b>PO203</b>	<b>0076</b>	Research on harmonics and overvoltage of photovoltaic power plant electricity energy collection system based on passive network model	Yongqiang ZHU, Jiacheng HAO, Xiangyu LI, Qi TANG, Ruihua XIA
<b>PO204</b>	<b>0108</b>	Two Harmonic Analysis of Short Circuit Current in Wind Farm	Zhang S F, Yang Y L, Chang X, Zhang M, Li S W, Wang J H, Lei D, Li H P, X L
<b>PO205</b>	<b>0290</b>	DC Power Collection System for PV Station Based on Impedance-source Multi-module DC-DC Step-up Converter	Xiuyi LI, Miao ZHU, Guoqing HE, Xu CAI
<b>PO206</b>	<b>0304</b>	Sub-synchronous oscillation analysis of complicated power grid incorporating wind farms with different types	Fan Yang, L B Shi, Y X Ni
<b>PO207</b>	<b>0364</b>	Investigating SSO risks of large-scale photovoltaic generation with the series compensated transmission lines	H.Y Tang, G.F Lu, X YU, Y.N Chi, Y LI, W. H Chen
<b>PO208</b>	<b>0538</b>	Analysis of Subsynchronous Current Propagation Path of Subsynchronous Oscillation Induced by Renewable Energy Integrated to the Power Grid	Peng Zhang, Puxuan Xu, Tianshu Bi
<b>PO209</b>	<b>0601</b>	An Advanced Design of Microgrid Interface for Multiple Microgrids Based on MMC and Energy Storage Unit	P Wu, W Huang, N Tai
<b>PO210</b>	<b>0733</b>	Study on online under frequency load shedding strategy with virtual inertia control of wind turbine	B X Huang, Z B Du, Y J Liu, F Zhao
<b>PO211</b>	<b>0748</b>	A new resistive DC fault current limiter	X Sujuan, Q Yufeng, B Tianshu, W Yanan
<b>PO212</b>	<b>0808</b>	Combination Strategy of DC Power Flow Controller for Multi-terminal HVDC System	Xu ZHONG, Miao ZHU, Ruanming HUANG, Xu CAI
<b>PO213</b>	<b>0849</b>	Optimized Design of DC-Side Smoothing Reactors in Meshed Multi-Terminal HVDC Systems Based on Symmetrical Bipolar Modular Multilevel Converter	C Li, L Lin, Z He, C Xu
<b>PO214</b>	<b>0853</b>	Distributed generation planning in stand-alone microgrid considering stochastic characteristic	Wanliang Fang, Haoming Liu, Feng Chen, Hao Zheng, Guanghui Hua, Weiguo He
<b>PO215</b>	<b>0864</b>	A quantitative method to pre-assess vulnerability for microgrid based on probability theory	Weiguo He, Guanghui Hua, Hao Zheng, Wanliang Fang, Haoming Liu