

电网与清洁能源

Power System and Clean Energy

DIANWANG YU QINGJIE NENGYUAN

中文核心期刊 Chinese Core Journals

中国科技核心期刊 Chinese Science and Technology Core Periodical



ISSN 1674-3814

主管单位 国家电网有限公司
主办单位 国网陕西省电力公司
西安理工大学水利水电土木建筑研究设计院
Competent Authority State Grid Corporation of China
Sponsors State Grid Shaanxi Electric Power Company
Xi'an University of Technology, Research and Design
Institute of Hydraulic and Architectural Engineering



万方数据



电网与清洁能源

DIANWANG YU QINGJIE NENGYUAN

第 37 卷

第 5 期 (总第 262 期)

2021 年 5 月 25 日

目 次

智能电网

- 01 多端直流输电系统分散式二次频率恢复及功率协调控制 / 刘兴华,张潇月,曹晖,郭方洪,倪骏康,熊连松,同向前
- 09 基于故障时域电流波形相似度的UPFC线路纵联保护 / 刘家军,孙骥,张年鲲,苗森
- 17 蝗虫优化神经网络在变压器故障诊断中的应用 / 徐新,蒋波涛,曹雯
- 24 MMC-HVDC系统功率器件的结温估算与寿命预测 / 周竞宇,赵宇,胡雨龙,任成林,纪攀
- 33 基于行波特征频率的配电网混合线路故障定位方法 / 李舟,乔文,谈震,褚子平,魏小栋,王辉,师琛,李悦嘉
- 43 考虑用户舒适度的需求侧负荷转移策略 / 贺强,张轶,刘旻,孟华,马莱斯
- 52 基于资源共享的地铁供电系统双层规划模型 / 延巧娜,陈庭记,邵雷,周涛
- 61 基于AHP-可变模糊集理论的抽水蓄能电站灌浆质量综合评价 / 王凯,崔志刚,鲁恩龙,纪光磊,赵绪新,叶红星,仝飞
- 67 基于机器学习的电力通信网带宽分配算法 / 周楠,张平,郑征,陈明昊,樊冰
- 74 考虑用户差异化可靠性需求的配电网规划方法 / 李俊杰,邓嘉明,姜世公,王云飞,李鹏,范须露

清洁能源

- 83 数据驱动的电动公交车精细化充电策略 / 王海伟,许建中,陈晨
- 96 计及风光/荷不确定性的综合能源站随机规划研究 / 朱刘柱,尹晨旭,王宝,张理,刘丽,叶钰童,戴巍
- 106 考虑调峰主动性的梯级水光互补与火电耦合系统经济调度 / 罗经馨,陈庆超,黄秋立
- 115 面向高比例新能源并网的双时间尺度电网电压控制 / 高一航,徐晓春,李鹏,颜长鑫,郭彦斌
- 123 双馈风力发电机组经串补并网的次同步振荡分析 / 严金昊,谢佳锟,姚李孝,杨国清
- 128 基于模糊神经网络的水轮机调速器PID控制 / 卢恒光,温步瀛,李天扬
- 134 光热电站并网对新能源电网运行特性的影响研究 / 杨国清,薛雨,姚李孝,时铭序
- 140 镇安抽水蓄能电站弃渣坝分区优化研究 / 王辉伟,薛方方,秦鸿哲,张朋飞,赵毅,陈家敏

本刊送阅:

国务院、国家能源局、各省(区)政府电力、能源主管领导
国家电网、能源企业主要负责人
中国科学院、中国工程院院士
电力、能源相关学会、协会
中国国家图书馆、中国版本图书馆、各省(区)图书馆

Contents

Smart Grid

- 01 Decentralized Secondary Frequency Restoration and Power Sharing Control for MTDC Transmission Systems / *LIU Xinghua, ZHANG Xiaoyue, CAO Hui, GUO Fanghong, NI Junkang, XIONG Liansong, TONG Xiangqian*
- 09 UPFC Line Pilot Protection Based on Fault Transient Current Waveform Similarity / *LIU Jiajun, SUN Ji, ZHANG Niankun, MIAO Miao*
- 17 Application of Grasshopper Optimization Neural Network in Power Transformer Fault Diagnosis / *XU Xin, JIANG Botao, CAO Wen*
- 24 Research on Junction Temperature Estimation and Life Prediction of Power Devices in MMC–HVDC System / *ZHOU Jingyu, ZHAO Yu, HU Yulong, REN Chenglin, JI Pan*
- 33 Fault Location Method for Hybrid Lines Based on Traveling Wave Characteristic Frequency in Distribution Network / *LI Zhou, QIAO Wen, TAN Zhen, CHU Ziping, WEI Xiaodong, WANG Hui, SHI Chen, LI Yuejia*
- 43 Demand Side Load Transfer Strategy Considering User Comfort / *HE Qiang, ZHANG Yi, LIU Yang, MENG Hua, MA Laisi*
- 52 Bi–Level Planning Model of Subway Power System Based on Resource Sharing / *YAN Qiaona, CHEN Tingji, SHAO Lei, ZHOU Tao*
- 61 Comprehensive Evaluation of Grouting Quality of the Pumped–Storage Power Station Based on AHP–Variable Fuzzy Set Theory / *WANG Kai, CUI Zhigang, LU Enlong, JI Guanglei, ZHAO Xuxin, YE Hongxing, TONG Fei*
- 67 Bandwidth Allocation Algorithm for Power Communication Network Based on Machine Learning / *ZHOU Nan, ZHANG Ping, ZHENG Zheng, CHEN Minghao, FAN Bing*
- 74 A Distribution Network Optimization Planning Method Based on Differential Reliability Demand / *LI Junjie, DENG Jiaming, JIANG Shigong, WANG Yunfei, LI Peng, FAN Xulu*

Clean Energy

- 83 A Refined Charging Strategy for Electric Buses Based on Data–Driven / *WANG Haiwei, XU Jianzhong, CHEN Chen*
- 96 Stochastic Programming of Integrated Energy Station Considering the Uncertainties of Wind Power, Photovoltaic and Load / *ZHU Liuzhu, YIN Chenxu, WANG Bao, ZHANG Li, LIU Li, YE Yutong, DAI Wei*
- 106 Economical Dispatch of the Coupling System of Cascade Hydro–Photovoltaic and Thermal Power Considering the Initiative of Peak Regulating / *LUO Jingxin, CHEN Qingchao, HUANG Qiuli*
- 115 Dual–Time–Scale Grid Voltage Control for High–Proportion New Energy Grid–Connected / *GAO Yihang, XU Xiaochun, LI Peng, YAN Changxin, GUO Yanbin*
- 123 Sub–Synchronous Oscillation Analysis of Double–Fed Wind Turbines via Series Complementary Grid Connection / *YAN Jinhao, XIE Jiakun, YAO Lixiao, YANG Guoqing*
- 128 PID Control of the Hydraulic Turbine Governor Based on Fuzzy Neural Network / *LU Hengguang, WEN Buyang, LI Tianyang*
- 134 A Study on the Influence of the Connected Photo–Thermal Power Station on the Operation Characteristics of the New Energy Grid / *YANG Guoqing, XUE Yu, YAO Lixiao, SHI Mingxu*
- 140 Research on Zoning Optimization of Waste Slag Dam of Zhen’an Pumped Storage Power Station / *WANG Huiwei, XUE Fangfang, QIN Hongzhe, ZHANG Pengfei, ZHAO Yi, CHEN Jiamin*