

美国《工程索引》(EI)核心期刊
荷兰Scopus收录期刊

中国科学引文数据库(CSCD)核心期刊
中文核心期刊

ISSN 1674-3415
CN 41-1401/TM
CODEN DXBYAZ

电力系统保护与控制

Power System Protection and Control



自动化·智能化
成就未来
be Automation
be Intelligence
be Future



The Expert of Solutions and Services for Smart Grid
智能电网解决方案与服务专家

南京国电南自自动化有限公司
NANJING SAC AUTOMATION CO., LTD.

地址: 南京市江宁区水阁路39号 邮编: 211153
电话: 025-6983 2000 传真: 025-6983 3000



许昌开普电气研究院有限公司 主办

2021 19
第49卷 第19期 总第589期

电力系统保护与控制

DIANLI XITONG BAOHU YU KONGZHI

第 49 卷第 19 期(总第 589 期) 2021 年 10 月 1 日出版

目次

理论分析

- 考虑动态激励型需求响应的微电网两阶段优化调度 魏震波, 张海涛, 魏平桢, 等(1)
- 配电线路故障指示器三相同步精度检测方法研究 曾 飞, 黄哲忱, 卫志农, 等(11)
- 考虑风电消纳的综合能源系统“源-网-荷-储”协同优化运行 帅挽澜, 朱自伟, 李雪萌, 等(18)
- 基于轨迹簇和 MBLDA 的受端电网暂态电压稳定评估 刘 鸣, 王长江, 李 斌, 等(27)
- 基于 MMC 的风电机组低电压穿越测试装置控制策略研究 刘正富, 王 朋, 郭敬梅, 等(38)

应用研究

- 区域风光集群断面裕度分配策略研究 姚 刚, 熊国江, 张 靖, 等(48)
- 基于有限元的低风压导线发热分析 魏建华, 赵文彬, 李 敏, 等(56)
- 多自然灾害下的架空输电线路运行风险评估 宋耐超, 王瑞琦, 李明明, 等(65)
- 云端平台对 ATP-EMTP 的计算性能提升探究 郭劲东, 李云阁, 王 敏, 等(72)
- 基于改进和声搜索算法的多目标配电网重构优化 吴建旭, 于永进(78)
- 基于时间序列的深度学习光伏发电模型研究 刘 倩, 胡 强, 杨凌帆, 等(87)
- 基于概率预测的用电采集终端电量异常在线实时识别方法 刘 宣, 唐 悦, 卢继哲, 等(99)

设计开发

- 基于时间敏感网络的流量调度机制在智能变电站中的研究与实现 周飞飞, 何迎利, 赵 华, 等(107)
- 输电线路二次自动重合闸方案的设计与验证 王震宇, 孙正伟, 王开白, 等(115)
- 配电网单相接地故障的柔性熄弧装置 贡保记, 马柯翔, 司渭滨, 等(124)

工程应用

- 考虑风电协议外送的调峰型电采暖虚拟电厂优化配置方法 王 宏, 魏晓强, 李 兵(135)
- 租赁与资产转移结合的优质供电服务模式 陈卫东, 姚知洋, 郭 敏, 等(145)
- 220 kV 变电站主变低压侧跳闸典型故障分析与启示 胡 浩, 魏华跃, 刘国玉, 等(153)
- LCC 与 VSC 级联的特高压混合直流输电系统控制策略 彭 忠, 孙攀磊, 韩 伟, 等(162)
- 应对直流连续换相失败的动态无功备用评估 江叶峰, 鲍颜红, 张金龙, 等(173)
- 高阻接地故障时消弧线圈并联小电阻接地的控制方法研究 叶远波, 汪胜和, 谢 民, 等(181)

期刊基本参数: CN 41-1401/TM * 1973 * s * A4 * 192 * zh * P * ¥ 80.00 * * 21 * 2021-10

Power System Protection and Control

(Semimonthly)

Vol. 49 No. 19 (Ser. 589)

October 1, 2021

CONTENTS

Theoretical Analysis

- Two-stage optimal dispatching for microgrid considering dynamic incentive-based demand response WEI Zhenbo, ZHANG Haitao, WEI Ping'an, et al(1)
- Three-phase synchronization accuracy detection method for a distribution line fault indicator ZENG Fei, HUANG Zhechen, WEI Zhinong, et al(11)
- “Source-network-load-storage” coordinated optimization operation for an integrated energy system considering wind power consumption SHUAI Wanlan, ZHU Ziwei, LI Xuemeng, et al(18)
- Transient voltage stability evaluation of a receiving-end power grid based on a trajectory cluster and MBLDA LIU Ming, WANG Changjiang, LI Bin, et al(27)
- Control strategy of wind turbine LVRT test equipment based on MMC LIU Zhengfu, WANG Peng, GUO Jingmei, et al(38)

Application Research

- Section margin allocation strategy for regional landscape cluster YAO Gang, XIONG Guojian, ZHANG Jing, et al(48)
- Heating analysis of a low-wind-pressure conductor based on finite elements WEI Jianhua, ZHAO Wenbin, LI Min, et al(56)
- Risk assessment of overhead transmission lines under multiple natural disasters SONG Naichao, WANG Ruiqi, LI Mingming, et al(65)
- Research on computing performance improvement of ATP-EMTP by cloud platform GUO Jindong, LI Yunge, WANG Min, et al(72)
- Multi-objective distribution network reconfiguration optimization based on an improved harmony search algorithm WU Jianxu, YU Yongjin(78)
- Deep learning photovoltaic power generation model based on time series LIU Qian, HU Qiang, YANG Lingfan, et al(87)
- Online real time anomaly recognition method for power consumption of electric energy data acquisition terminal based on probability prediction LIU Xuan, TANG Yue, LU Jizhe, et al(99)

Design and Development

- Research and realization of a traffic scheduling mechanism based on a time-sensitive network in a smart substation ZHOU Feifei, HE Yingli, ZHAO Hua, et al(107)
- Design and verification of second automatic reclosing scheme for transmission lines WANG Zhenyu, SUN Zhengwei, WANG Kaibai, et al(115)
- Flexible arc extinguishing device for a single-phase ground fault in a distribution network YUN Baoji, MA Kexiang, SI Weibin, et al(124)

Engineering Application

- Optimal configuration method of electric heating in a virtual power plant with peak load regulation considering a wind power delivery protocol WANG Hong, WEI Xiaoqiang, LI Bing(135)
- Service pattern for premium power supply based on a combination of leasing and property transfer CHEN Weidong, YAO Zhiyang, GUO Min, et al(145)
- Typical fault analysis and revelation of a low voltage side trip of a main transformer in a 220 kV substation HU Hao, WEI Huayue, LIU Guoyu, et al(153)
- Control strategy of a hybrid UHVDC transmission system cascaded by LCC and VSC PENG Zhong, SUN Panlei, HAN Wei, et al(162)
- Dynamic reactive power reserve evaluation for DC continuous commutation failure JIANG Yefeng, BAO Yanhong, ZHANG Jinlong, et al(173)
- Study on the control method of high impedance faults in the neutral via arc suppression coil paralleled with a low resistance grounded system YE Yuanbo, WANG Shenghe, XIE Min, et al(181)