

电力系统保护与控制

第 38 卷第 22 期(总第 328 期)

目次

理论分析

- 基于混沌量子蜜蜂算法的机会约束输电规划 曾鸣,田廓,薛松,等(1)
- 电网建设外部环境中利益群体博弈关系仿真分析 刘贞,阎建明,施於人(8)
- 基于神经网络自适应 PI 控制的 SSSC 潮流控制器 张爱国,韩军锋,蒋程(15)
- 多时段水火电市场均衡分析 杨建林,耿静,严正,等(20)
- 基于连续体模型的电力系统机电距离研究 王德林,王小艳(25)
- 基于合闸控制策略的变压器励磁涌流抑制措施研究 沃建栋,郑涛,万磊,等(32)
- 暂态稳定约束的可用输电能力计算 匡文凯,张红艳,吴政球(37)
- 有源电力滤波器控制时延的研究 杨小品,谈锋博,李尚盛,等(43)
- 新型 ICT 网络中的一种动态路由波长分配算法 吴润泽,汪波涛,唐良瑞,等(48)
- 基于小波包变换的电机定子故障特征提取方法 邱赤东,薛征宇,邵萍波,等(52)
- 零模复合导纳法小电流接地故障选线与定位 孙波,孙同景,薛永端,等(57)
- 牵引供电新型异相短路保护原理的研究 李冀昆,高仕斌,王涛(63)

应用研究

- 基于综合性能指标的交直流混合系统直流调制研究 吴华坚,王渝红,李兴源,等(68)
- 基于 Matra 位差算法的电站自动化改造模型与进度控制研究 陈松石,范春菊,崔新奇,等(74)
- GMDH 和变结构协整理论在电力负荷预测中的应用 顾洁,储琳琳,张宇俊,等(80)
- 基于粒子群进化算法的电力系统状态估计研究 闫丽梅,张士元,任伟建,等(86)
- 基于小波多分辨率分析的电压暂降源定位研究 杨杰,王金浩,章雪萌,等(90)
- 混沌模拟树木生长算法在无功优化中的应用 陈勇,吕树河,杨丽徙(96)
- 考虑夏季气象因素的短期负荷预测方法研究 方鸽飞,胡长洪,郑奕辉,等(100)
- 智能配电网自愈功能与评价指标 李天友,徐丙垠(105)
- 中国南方电网调度自动化实时通信的现状分析和研究 谈苏伟(109)
- 钒液流储能电池建模及其平抑风电波动研究 李国杰,唐志伟,聂宏展,等(115)
- 基于改进模糊神经网络的配电网故障选线研究 张俊芳,刘鹏(120)
- 计及风电场的发输电可靠性评估 姜文,严正,杨建林(126)

基于支持向量机的谐波阻抗估计方法 康 婕,解绍锋,刘晓菊,等(131)

基于电路理论的发电权交易网损增量补偿解析 艾东平,鲍 海,杨以涵(135)

纵联电流差动保护数据同步技术及通道切换时数据交换的研究 李 钢,冯辰虎,孙集伟,等(141)

基于解析法的变电站一次系统仿真研究 刘 东,张炳达(146)

基于多分类支持向量机的电压暂降源识别 吕千云,方奇品,蔡秀珊(151)

DG 容量对配电网电流保护的影响及对策研究 冯希科,邵能灵,宋 凯,等(156)

针对大量接地支路电网形成节点阻抗矩阵的改进算法 杨美佳,刘宝柱(161)

高阻抗变压器后备保护的研究 黄 曙,邓茂军,张鹏远(166)

PVLAN 在 110 kV 变电站自动化系统组网中的设计与实现 吴端华,程 华,黄文龙,等(170)

设计开发

电力高压触点温度无线监测系统的研发 邢晓敏,李 波,陈 静(174)

基于 SVG 和 Web Service 的监控图库关联组件柔性重构 刘 莉,屈志坚,王 健(179)

基于 Wince 嵌入式内核的新型电力参数实时测量系统 尚秋峰,陈于扬,姚国珍,等(183)

一种电网尖脉冲干扰滤波器设计方法 郭海涛,杨宏伟,周 军(186)

一种 UPQC 直流侧电压控制器的设计方法研究 谭智力,朱冬姣(190)

基于 FPGA 的数字化变电站电压并列与切换设计 黄 灿,郑建勇,梅 军(196)

基于 FPGA 的矿井电网电流保护系统研究 张晓明,公茂法,郝忠梅,等(200)

工程应用

杂散电容对二次回路的影响及防范措施 汤 磊,高厚磊,苏文博,等(206)

变电站蓄电池容量计算和算法改进 田 羽,何 仲,范春菊(210)

数字化技术在 220 kV 变电站改造中的应用 谷 成,徐 超,谢 珂,等(214)

500 kV 线路保护升级改造安全防范措施 姚莉娜,刘 华,张 斌,等(220)

自备电厂并网的 110 kV 串供线路保护配置整定探讨 侯元文,钱 卫(224)

架空线路无线电干扰评价分析 谢延超(227)

综述

物联网在电力系统的应用展望 李 勳,冀庆武,乔 卉(232)

矿井低压电网中性点接地方式与漏电保护技术的研究 陈 奎,孙常青,唐 轶(237)

基于母联断路器为跳闸对象的保护方案综述 李 新,熊 炬,董 泉,等(242)

Power System Protection and Control

(Semimonthly)

Vol. 38 No. 22 (Ser. 328)

November 16, 2010

CONTENTS

Theoretical Analysis

- Chance constrained transmission planning method based on chaos quantum honey bee algorithm ZENG Ming, TIAN Kuo, XUE Song, et al(1)
- Simulation analysis on the game of interest groups in the external environment of power grid construction LIU Zhen, YAN Jian-ming, SHI Yu-ren(8)
- Power flow control of SSSC based on adaptive PI controller with neural networks ZHANG Ai-guo, HAN Jun-feng, JIANG Cheng(15)
- The equilibrium analysis for multi-periods hydro-thermal electricity market YANG Jian-lin, GENG Jing, YAN Zheng, et al(20)
- Study on electromechanical distance of power system based on the continuum model WANG De-lin, WANG Xiao-yan(25)
- Study on inrush current suppression method based on the breaker control strategy WO Jian-dong, ZHENG Tao, WAN Lei, et al(32)
- Calculation of available transfer capability with transient stability constraints KUANG Wen-kai, ZHANG Hong-yan, WU Zheng-qiu(37)
- Study on control delays of active power filter YANG Xiao-pin, DAN Feng-bo, LI Shang-sheng, et al(43)
- A dynamic routing and wavelength assignment algorithm in novel ICT networks WU Run-ze, WANG Bo-tao, TANG Liang-rui, et al(48)
- A feature extraction method for motor stator fault based on wavelet packets transform QIU Chi-dong, XUE Zheng-yu, SHAO Ping-bo, et al(52)
- Fault line identification and fault section location based on transient zero-module combination admittance in non-solidly earthed network SUN Bo, SUN Tong-jing, XUE Yong-duan, et al(57)
- Research on new protection principle against wrong-phase short circuit of the AC traction supply LI Ji-kun, GAO Shi-bin, WANG Tao(63)

Application Research

- Study on DC modulation for AC/DC hybrid transmission system based on comprehensive performance index WU Hua-jian, WANG Yu-hong, LI Xing-yuan, et al(68)
- Modelling and progress control of substation automation retrofit based on Matra potential algorithm CHEN Song-shi, FAN Chun-ju, CUI Xin-qi, et al(74)
- Application of GMDH and variable co-integration theory in power load forecasting GU Jie, CHU Lin-lin, ZHANG Yu-jun, et al(80)
- Power system state estimation based on particle swarm optimization algorithm YAN Li-mei, ZHANG Shi-yuan, REN Wei-jian, et al(86)
- Analysis of voltage sag source location based on wavelet multiresolution method YANG Jie, WANG Jin-hao, ZHANG Xue-meng, et al(90)
- Chaotic trees growth simulation algorithm for reactive power optimization CHEN Yong, Lü Shu-he, YANG Li-xi(96)
- Study on the method of short-term load forecasting considering summer weather factors FANG Ge-fei, HU Chang-hong, ZHENG Yi-hui, et al(100)
- Self-healing and its benchmarking of smart distribution grid LI Tian-you, XU Bing-yin(105)
- Analysis and research of real-time communication current situation in power dispatch automation for China south power grid TAN Su-wei(109)
- Modelling and controlling of vanadium redox flow battery to smooth wind power fluctuations LI Guo-jie, TANG Zhi-wei, NIE Hong-zhan, et al(115)
- Research on fault line detection for distribution network based on improved fuzzy neural networks algorithm ZHANG Jun-fang, LIU Peng(120)

Reliability assessment of composite generation and transmission system considering wind farms	JIANG Wen, YAN Zheng, YANG Jian-lin(126)
Assessing the harmonic impedance based on support vector machine	KANG Jie, XIE Shao-feng, LIU Xiao-ju, et al(131)
Analysis of incremental loss compensation on generation rights trade based on circuit theory	AI Dong-ping, BAO Hai, YANG Yi-han(135)
Research on data synchronization technology and data exchanging while channel switching of current differential protection	LI Gang, FENG Chen-hu, SUN Ji-wei, et al(141)
Research on analytical simulation of substation primary system	LIU Dong, ZHANG Bing-da(146)
Identification of voltage sags source based on multi-class support vector machine	Lu Gan-yun, FANG Qi-pin, CAI Xiu-shan(151)
Research on the impact of DG capacity on the distribution network current protection and countermeasure	FENG Xi-ke, TAI Neng-ling, SONG Kai, et al(156)
An improved algorithm for forming Z-matrix of power grid containing large amount of grounded-branches	YANG Mei-jia, LIU Bao-zhu(161)
Study of high-impedance transformer backup protection	HUANG Shu, DENG Mao-jun, ZHANG Peng-yuan(166)
The design and implementation of PVLAN in 110 kV substation automation system	WU Duan-hua, CHENG Hua, HUANG Wen-long, et al(170)
Design and Development	
Development of wireless monitoring system for power high voltage contacts' temperature	XING Xiao-min, LI Bo, CHEN Jing(174)
Graph-database component flexible reconstruction of monitoring based on SVG and Web Service	LIU Li, QU Zhi-jian, WANG Jian(179)
A novel real-time power parameters measurement system based on embedded Wince-kernel	SHANG Qiu-feng, CHEN Yu-yang, YAO Guo-zhen, et al(183)
Method for designing a sharp pulse disturbance filter	GUO Hai-tao, YANG Hong-wei, ZHOU Jun(186)
Design of voltage controller for UPQC on its DC side	TAN Zhi-li, ZHU Dong-jiao(190)
FPGA-based logical control strategy of voltage parallel and voltage switch in digital substation	HUANG Can, ZHENG Jian-yong, MEI Jun(196)
Study on current protection system of mining power network based on FPGA	ZHANG Xiao-ming, GONG Mao-fa, XI Zhong-mei, et al(200)
Engineering Application	
Influence of stray capacitance on secondary circuit and its countermeasures	TANG Lei, GAO Hou-lei, SU Wen-bo, et al(206)
Storage battery capacity calculation and algorithm improvement	TIAN Yu, HE Zhong, FAN Chun-ju(210)
Application of digital technology in the innovation of 220 kV substation	GU Cheng, XU Chao, XIE Ke, et al(214)
The security precautions in the 500 kV transmission line protection upgrading and replacing	YAO Li-na, LIU Hua, ZHANG Bin, et al(220)
Discussion on 110 kV series lines protection schemes and setting of self-supply power plant synchronization	HOU Yuan-wen, QIAN Wei(224)
Research on radio interference from typical overhead transmission lines	XIE Yan-chao(227)
Survey	
The application of IOT in power systems	LI Xun, GONG Qing-ou, QIAO Hui(232)
Research on neutral grounding mode and technology of leakage protection in mine low-voltage electric network	CHEN Kui, SUN Chang-qing, TANG Yi(237)
Summary of relay scheme which trips bus-tie	LI Xin, XIONG Ju, DONG Quan, et al(242)