

编辑委员会

主任委员:周爱国

副主任委员:张明文 丁斌

委员:

赵自刚 郑小江 周京龙 徐文涛
邱世平 张燕飞 杨保荣 杜平
马聪永 于洪泽 郭强 王天伟
张荣英 王勇 王向东 刘勇
付文杰 朱爱民 董国防 刘朝晖

主编:丁斌

副主编:胡文平

责任编辑:丁力

主管:国网河北省电力有限公司

主办:河北省电机工程学会

国网河北省电力有限公司电力科学研究院

编辑出版:《河北电力技术》编辑部

地址:石家庄市体育南大街238号

邮编:050021

电话:(0311)66672289, 66672290

E-mail:hebeidljs@163.com

传真:(0311)66672293

发行:国网河北省电力有限公司电力科学研究院

印刷:河北师范大学印刷厂

定价:8.00元

ISSN 1001-9898

CN 13-1082/TM

声明:向本刊投稿即视为同意将稿件用于收录本刊的电子出版物和网站。

目次

专家论坛

基于大数据分析的电动汽车实时电价与负荷需求管理研究

.....杨潇,王楠,于腾凯,等(1)

特高压技术

特高压对河北南网 500 kV 电压水平影响研究.....陈丽,师立涛(5)

超高压线路保护频繁启动故障分析

.....韩辰龙,赵杜,邳浚哲,等(8)

1 000 kV 特高压 GIS 绝缘故障及实例分析

.....池威威,刘倩,董俊虎,等(10)

分析与研究

基于LabVIEW的水和水蒸汽热力性质算法研究

.....李晓光,王晓革,高欢乐,等(13)

反射层对不同保温材料保温性能的提升效果分析

.....陈国强,戚琳,刘杰(16)

基于云模型和盲数的输电系统可靠性评估

.....王秋莎,李泉,肖华(19)

母线保护常规和复式比例制动差动元件灵敏度和安全系数计算分析

.....曹媛,曹树江(24)

神经网络在汽轮机转子故障诊断中的应用研究

.....高树奎,华兴鲁,孟帅(29)

电能计量

电能表自动化检定流水线表位故障定位及报警系统设计

.....王立斌,高波,赵佩,等(33)

运行负荷下带电更换网省关口电能表作业研究

.....高利明,徐二强,吴春红,等(35)

基于载波通信的电压互感器二次压降测试技术研究

.....周忠良,杨子夜,谷魁宪,等(38)

智能电能表反向有功电量走字原因分析

.....任鹏,李翀,陶鹏,等(40)

故障分析

火电厂锅炉灭火保护可靠性低的原因分析及改进

.....魏向国,倪敏,张明法,等(43)

500 kV变电站断路器选相分合闸装置改进方案分析

.....孟妍,郭朝云,王维(46)

220 kV复合绝缘子芯棒脆断故障分析

.....刘杰,贾伯岩,田霖,等(49)

600 MW空冷供热机组补水率高原因分析及处理措施

.....宋建军,刘楠,李国旺(51)

一起500 kV变压器乙炔含量超标问题的原因分析与处理

.....张锐,冯鹏森,张紫云,等(54)

一起因错误接线造成的上网电量追补问题分析

.....赵岩,徐二强,高利明,等(56)

一起由非全相继电器异常动作引起的跳闸故障分析

.....张韶光,王煊,王晨宇,等(59)

下期要目.....(4)

期刊基本参数:CN13-1082/TM*1982*b*A4*62*zh*P*¥8.00*5000*20*2018-02*n

CONTENTS

Expert Forum

- Research on Real Time Price of Electric Vehicle and Load Demand Management Based on Big Data Analysis
..... Yang Xiao, Wang Nan, Yu Teng kai, et al(1)

UHV technology

- Influence Study of UHV on 500 kV Voltage Level of Hebei Southern Power Grid..... Chen Li, Shi Litao(5)
Analysis on Frequent Starting Fault of UHV Line Protection
..... Han Chenlong, Zhao Du, Pi Junzhe, et al(8)
Insulation Fault and Example Analysis of 1 000 kV UHV GIS..... Chi Weiwei, Liu Qian, Dong Junhu, et al (10)

Analysis and Research

- Study of Algorithm for Water and Steam Thermodynamic Properties Based on LabVIEW
..... Li Xiaoguang, Wang Xiaoping, Gao Huanle, et al(13)
Research on Influence of Reflectors on Performance of Heat Insulation Layer..... Chen Guoqiang, Qi Lin, Liu Jie(16)
Reliability Evaluation of Transmission System Based on Cloud Model and Blind Number
..... Wang Qiusha, Li Quan, Xiao Hua(19)
Calculate and Analysis to Sensitivity and Stability of Conventional & Complex Ratio Restraint Different Relays for Busbar Protection..... Cao Yuan, Cao Shujiang(24)
Application Research of Neural Network in Fault Diagnosis of Turbine Rotor
..... Gao Shukui, Hua Xinglu, Meng Shuai(29)

Electricity Metering

- Design of Meter Position Fault Location and Alarm System for Automatic Verification Pipeline of Electric Energy Meter
..... Wang Libin, Gao Bo, Zhao Pei, et al(33)
Study on Network Provincial Electric Energy Meter On-line Replacement Under Real Load
..... Gao Liming, Xu Erqiang, Wu Chunhong, et al(35)
Research of Potential Transformer Secondary Voltage Drop Test Technology Based on Carrier Wave Communication
..... Zhou Zhongliang, Yang Ziyi, Gu Kuixian, et al(38)
Causes Analysis on Reverse Active Electric Energy in Smart Meter
..... Ren Peng, Li Chong, Tao Peng, et al(40)

Fault Analysis

- Analysis and Improvement of Low Reliability of Boiler Flame Failure Protection
..... Wei Xiangguo, Ni Min, Zhang Mingfa, et al(43)
Analysis on Improvement Scheme of Phase Selector and Closing Device for Breaker in 500 kV Substation
..... Meng Yan, Guo Chaoyun, Wang Wei(46)
Cause Analysis on Core Fracture of Imported Composite Insulator on 220 kV Transmission Line
..... Liu Jie, Jia Boyan, Tian Lin, et al(49)
Cause Analysis on High Hydrating Rate of 600 MW Air Cooling Heating Unit and Settlement Measures
..... Song Jianjun, Liu Nan, Li Guowang(51)
Cause Analysis and Treatment of 500 kV Transformer with Excess Acetylene Content Exceeding Standard
..... Zhang Rui, Feng Pengsen, Zhang Ziyun, et al(54)
Analysis of Wrong Electric Energy Caused by Wrong Wiring..... Zhao Yan, Xu Erqiang, Gao Liming, et al(56)
Analysis of Some Trip Accident Caused by the Abnormal Action of Open-phase Relay
..... Zhang Shaoguang, Wang Xuan, Wang Chenyu, et al(59)

HEBEI ELECTRIC POWER(Bimonthly)Vol.37,1(Ser.No.222)Feb.25,2018

Co-sponsored by:HEBEI SOCIETY FOR ELECTRICAL ENGINEERING AND STATE GRID HEBEI ELECTRIC POWER RESEARCH INSTITUTE

Chief Editor:Ding Bin

Edited and Published by:HEBEI ELECTRIC POWER Editorial Department(238 South Tiyu Street,Shijiazhuang,Hebei P.R.C PC 050021)

Issued by:STATE GRID HEBEI ELECTRIC POWER RESEARCH INSTITUTE

Printed by:Printing Factory of Hebei Normal University