

《四川电力技术》
编辑委员会

主任委员	刘 勇
副主任委员	王 平
	刘俊勇
委 员	(按姓氏笔画笔形为序)
丁理杰	邓亚军 甘德刚
田立峰	李镇义 朱国俊
朱 康	刘天琪 苏少春
杨子辛	肖 红 吴广宁
余 熙	邹见效 陈 缨
胡 灿	袁邦亮 徐 波
董秀成	韩晓言 曾嘉志
秘 书	李世平
	程文婷

四川电力技术

双月刊 1978 年创刊

中国标准连续出版物号:

ISSN1003-6954

CN51-1315/TM

2019 年第 42 卷第 5 期(总 263 期)

主管单位:四川省电力公司

主办单位:四川省电机工程学会

四川电力科学研究院

发行范围:公开

主 编:陈 缨

副 主 编:程文婷

编辑出版:《四川电力技术》编辑部

发 行:四川电力科学研究院

地 址:成都市锦晖西二街 16 号

邮政编码:610041

电话:(028)69995169,69995168,69995165

E-mail:cdsdljs@163.com

印 刷:四川科锐得文化传播有限公司

封面设计:成都宏泰广告有限公司

国内定价:每册 6.00 元

[期刊基本参数]CN51-1315/TM*1978*

b*A4*94*zh*P*¥6.00*3000*18*

2019-10

目 次

· 电力泛在物联网 ·

基于卫星共视技术的泛在电力物联网时间同步网

..... 段翔兮,冯世林,李小鹏,吴 杰,高艺文,龙 呈(1)

多能优化调度在智慧能源管控平台中的应用..... 张 舵,马 超,李嘉逸(5)

考虑自恢复能力的电力-通信网可靠性与经济性分析

..... 罗紫航,关翔友,魏震波(10)

基于电力计量大数据的电源规划研究..... 蔡高雷,刘桂龙(17)

· 新能源技术 ·

新能源配电网多运行指标协同的灵敏性分析方法

..... 张庆晖,吴长元,吴杰康,吴 帆,唐惠玲,陈灵敏(24)

平滑风电出力的风储联合系统能量管理协调控制研究..... 詹仲强,付菊霞(29)

使用卡尔曼滤波修正蒙特卡洛算法的电动汽车充电负荷预测研究

..... 李小雨,肖 汉,李嘉逸(37)

· 电网技术 ·

基于逻辑回归的双 Y 型外熔丝电容器故障诊断技术研究

..... 滕予非,唐嘉忆,段翔兮,宋 梁,李世龙(41)

智能变电站便携式接口回路测试仪的研制

..... 龚华麟,张择策,曾祥力,李官宇,令狐静波,曾 雪(46)

基于绝缘横担的配电网综合防雷系统配置与实施方案 林礼健(51)

提升金沙江二期特高压直流外输电举措..... 陈汉雄,李晓明(56)

变电站序列控制远方操作安全风险防治与管控

..... 邹沛恒,代宇涵,郭 果,郑永康(61)

水平荷载对支盘桩受压承载力的影响分析

..... 王 红,彭社琴,郑卫锋,孙珍茂(67)

服务于电网运行的监控信息事件化关联分析方法研究

..... 代宇涵,邹沛恒,张凤西,黄华伟,孙永超,罗荣森(72)

· 高电压技术 ·

高海拔 500 kV 交流输电线路绝缘子片数选择研究

..... 唐 巍,梁 明,盛道伟,霍 锋,刘从法(77)

非正常回路中感应电流引起电容式电压互感器发热的研究

..... 郭世晓,艾 飞,胡 巍,洪 丽,林 楠,张如宏(82)

基于超高压变电设备缺陷特征的状态检修提升策略 汪 鑫,王紫鉴,魏 阳(86)

主变压器低压侧三相空载电压不平衡分析

..... 王能进,周子洋,李 飞,覃春阳,王 哲(92)

CONTENTS

• Ubiquitous Power Internet of Things •

Time Synchronization Network in UPIoT Based on Satellite Common – view Technology	 Duan Xiangxi, Feng Shilin, Li Xiaopeng, Wu Jie, Gao Yiwen, Long Cheng(1)
Application of Multi – energy Scheduling Optimization to Smart Energy Control Platform	 Zhang Duo, Ma Chao, Li Jiayi(5)
Reliability and Economy Analysis of Cyber Physical Power Systems Considering Self – recovery Ability	... Luo Zihang, Guan Xiangyou, Wei Zhenbo(10)
Research on Generation Planning Based on Big Data of Electricity Metering	 Cai Gaolei, Liu Guilong(17)

• Renewable Energy Technology •

Sensitivity Analysis Method for Multiple Operational Index Coordination of Distribution Network with Renewable Energy	 Zhang Qinghui, Wu Changyuan, Wu Jiekang, Wu Fan, Tang Huiling, Chen Lingmin(24)
Research on Energy Management and Coordination Control for Combined System of Wind Power and Energy Storage to Smooth Wind Power Output	 Zhan Zhongqiang, Fu Juxia(29)
Research on Load Forecasting for Electric Vehicle Charging Using Monte Carlo Method Modified by Kalman Filter	... Li Xiaoyu, Xiao Han, Li Jiayi(37)

• Power System Technology •

Logical Regression Based Fault Diagnosis for External – fusing Double – Star Power Capacitor	 Teng Yufei, Tang Jiayi, Duan Xiangxi, Song Liang, Li Shilong(41)
Development of Portable Interface Circuit Tester for Smart Substation	 Gong Hualin, Zhang Zece, Zeng Xiangli, Li Guanyu, Linghu Jingbo, Zeng Xue(46)
Configuration and Implementation Scheme for Integrated Lightning Protection System of Distribution Network Based on Insulated Crossarm	 Lin Lijian(51)
Measures for Improving UHVDC Delivery Output in Second Phase of Jinsha River Project	 Chen Hanxiong, Li Xiaoming(56)
Prevention and Control of Safety Risk in Remote Operation of Substation Sequence Control	 Zou Peiheng, Dai Yuhang, Guo Guo, Zheng Yongkang(61)
Analysis on Influence of Horizontal Load on Bearing Capacity of Branch Pole	 Wang Hong, Peng Sheqin, Zheng Weifeng, Sun Zhenmao(67)
Research on Event – based Correlation Analysis Method for Monitoring Information Serving Power Grid Operation	 Dai Yuhang, Zou Peiheng, Zhang Fengxi, Huang Huawei, Sun Yongchao, Luo Rongseng(72)

• High Voltage Technology •

Research on Selection for Number of Insulators of 500 kV AC Transmission Line in High Altitude Area	 Tang Wei, Liang Ming, Sheng Daowei, Huo Feng, Liu Congfa(77)
Research on Overheating of Capacitive Voltage Transformer Caused by Induced Current in Abnormal Circuit	 Guo Shixiao, Ai Fei, Hu Wei, Hong Li, Lin Nan, Zhang Ruhong(82)
Promotion Strategy of Condition Based Maintenance Based on Flaw Characterization of Extra – high Voltage Substation Equipment	 Wang Xin, Wang Zijian, Wei Yang(86)
Unbalance Analysis Of Three – phase No – load Voltage in Low Voltage Side of Main Transformer	 Wang Nengjin, Zhou Ziyang, Li Fei, Qin Chunyang, Wang Zhe(92)

SICHUAN ELECTRIC POWER
TECHNOLOGY

2019 Vol. 42 No. 5

(Ser. No. 263)

Bimonthly, Started in 1978

Address: No. 16, 2ND Jinhui West Street, Chengdu, Sichuan,
China

Postcode: 610041

Sponsor:

Sichuan Society of Electrical Engineering

Sichuan Electric Power Research Institute

Editor in chief: Chen Ying

Editor & Publisher:

Editorial Department of SICHUAN ELECTRIC POWER
TECHNOLOGY