

中国科技核心期刊 陕西省科技期刊一等奖

ISSN1673-7598  
CN61-1452/TM

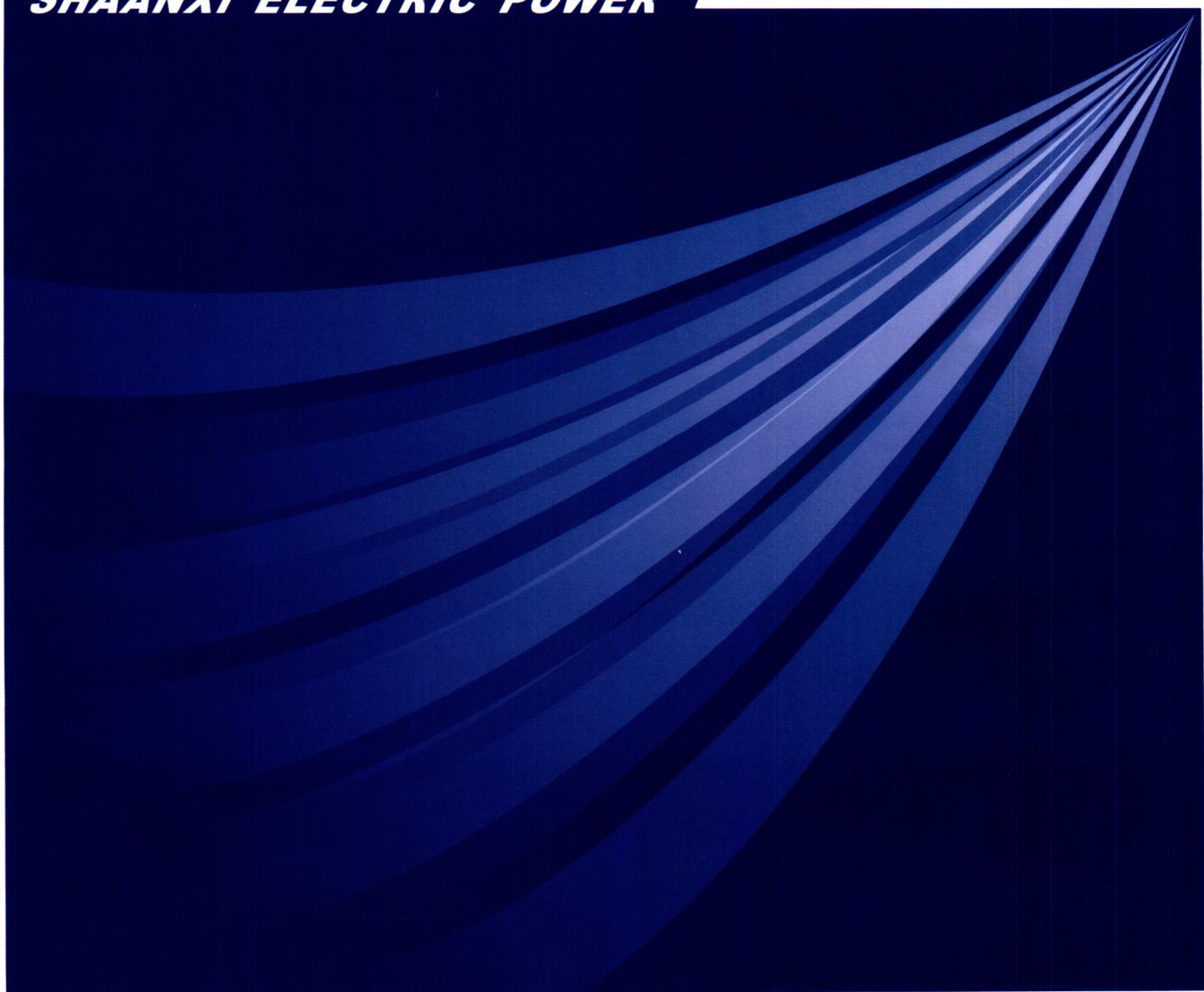
# 陕西电力

4  
2013

第四十一卷

主管单位：国家电网公司 主办单位：陕西省电力公司 协办单位：陕西省电机工程学会

***SHAANXI ELECTRIC POWER***



- 中国雾霾的产生机理及应对策略研究
- 基于虚拟仪器技术的输电线路微型物理仿真系统的设计
- 考虑经济发展趋势的中长期电力负荷SALSSVM预测
- 可再生能源发电并网关键技术的研究现状与趋势分析

## ● 特别推荐

- 1 中国雾霾的产生机理及应对策略研究 ..... 石元春

## ● 电网技术

- 5 基于虚拟仪器技术的输电线路微型物理仿真系统的设计 ..... 章霄微,赵云龙,贾征,等

- 8 独立电力系统故障分量差动保护的仿真分析 ..... 胡丹,张雪敏,袁兆强,等

- 11 基于负荷变化的配电网重构研究 ..... 董家读,马献乐,陈泽淮,等

- 15 视在阻抗角失步解列判据的改进研究 ..... 陈春节,杨秀,顾丹珍

- 20 南方电网架空输电线路覆冰监测系统及其运行分析 ..... 李昊,傅闯,刘旭,等

- 24 运行中500 kV输电线路绝缘子串自然积污及污闪特性研究 ..... 夏谷林,卢喜龙,赖光霖,等

## ● 新能源

- 31 可控负荷在微网孤岛运行时的调频作用研究 ..... 江岳春,王志刚,杨春月

- 37 基于Copula理论的风电相依概率性分析 ..... 张龙,代中余

- 42 基于多代理系统的微网与电网协调运行模式 ..... 胡丽萍,朱雨晨,许佳佳

- 47 可再生能源发电并网关键技术的研究现状与趋势分析 ..... 刘俊

## ● 电源设计

- 53 复合储能不间断电源系统的缓冲电路设计 ..... 牛博,李源,王森,等

## ● 负荷预测

- 57 考虑经济发展趋势的中长期电力负荷SALSSVM预测 ..... 李泓泽,郭森,李缓,等

## ● 技术应用

- 61 基于同轴电容的过电压传感器研究 ..... 王永强,谢迎天,王慧君

- 66 甘南电网孤网运行分析及控制方案的制定 ..... 李祥,刘继荣,赵红磊,等

- 70 配电网混合线路单端行波测距方法的研究 ..... 李配配,邓雷,赵永雷

- 74 高速铁路贯通供电系统及其谐波特性研究 ..... 南富强

- 78 基于奇异点检测的单端行波测距的仿真分析 ..... 石岩,孟凡铮,王喜疆,等

- 82 330 MW CFB锅炉CCS控制系统的分析与改进 ..... 郭石开,李菲,卫奕

- 86 凝结水泵高压变频器改造方案分析与探讨 ..... 毛旭波,张宏,赵虞凌

- 89 安康水电站调洪成果复核计算的研究与应用 ..... 瞿富强,王璞,杨启龙,等

## FEATURED FOCUS

- 1 Frog Haze Production Mechanism & Treatment Strategy in China ..... SHI Yuan-chun

## GRID TECHNOLOGY

- 5 Design of Transmission Lines Physical Simulation System Based on Virtual Instrument ..... ZHANG Xiao-wei, ZHAO Yun-long, JIA Zheng, et al  
8 Study on Fault Component Differential Protection for Isolated Power System ..... HU Dan, ZHANG Xue-min, YUAN Zhao-qiang, et al  
11 Studies on Distribution Network Reconfiguration Based on Load Changes ..... DONG Jia-du, MA Xian-le, CHEN Ze-huai, et al  
15 Study on the Improvement of Asynchronous Oscillation Criterion Based on Apparent Impedance Angle ..... CHEN Chun-jie, YANG Xiu, GU Dan-zhen  
20 Overhead Transmission Line Ice Monitoring System of China Southern Power Grid & Its Operation Analysis ..... LI Hao, FU Chuang, LIU Xu, et al  
24 Pollution Accumulation and Flashover Performance of Insulator Strings on 500 kV AC Transmission Line Under Service Voltage ..... XIA Gu-lin, LU Xi-long, LAI Guang-lin, et al

## NEW ENERGY

- 31 Application of Controllable Load in Frequency Modulation of Microgrid Island Operation ..... JIANG Yue-chun, WANG Zhi-gang, YANG Chun-yue  
37 Wind Power Dependent Probability Analysis Based on the Theory of Copula ..... ZHANG Long, DAI Zhong-yu  
42 Microgrid and Grid Co-operation Model Based on Multi-Agent System ..... HU Li-ping, ZHU Yu-chen, XU Jia-jia  
47 Status and Trend Analysis on Grid Integration Key Technologies of Renewable Energy Power Generation ..... LIU Jun

## POWER SOURCE DESIGN

- 53 Buffer Circuit Design of Uninterruptible Power Supply System Based on Composite Energy Storage ..... NIU Bo, LI Yuan, WANG Sen, et al

## LOAD FORECAST

- 57 Medium and Long Term Power Load Forecasting Based on SALSSVM Model Considering Economic Development Trend ..... LI Hong-ze, GUO Sen, LI Huan, et al

## TECHNICAL APPLICATION

- 61 Research on Overvoltage Sensor Based on Coaxial Capacitor ..... WANG Yong-qiang, XIE Ying-tian, WANG Hui-jun  
66 Analysis on Gannan Power Grid Islanding Operation and Formulation of Control Scheme ..... LI Xiang, LIU Ji-Rong, ZHAO Hong-Lei, et al  
70 Study on Single-ended Traveling Wave Fault Location in Distribution Network Hybrid Lines ..... LI Pei-pei, DENG Lei, ZHAO Yong-lei  
74 Study on High-speed Railway Continuous Power Supply System and Its harmonic characteristics ..... NAN Fu-qiang  
78 Single-ended Traveling Wave Fault Location Based on Singular Point Check ..... SHI Yan, MENG Fan-zheng, WANG Xi-jiang, et al  
82 Analysis & Improvement of 330 MW CFB Boiler CCS Control System ..... GUO Kai-shi, LI Fei, WEI Yi  
86 Analysis on Condensate Pump HV Frequency Inverter Retrofitting & its Practice ..... MAO Xu-bo, ZHANG Hong, ZHAO Yu-ling  
89 Study & Application of Flood Regulation Results Recheck & Calculation in Ankang Hydropower Plant ..... QU Fu-qiang, WANG Pu, YANG Qi-long, et al