

第 2 期

2014

第7卷 第2期 Vol.7 No.2

ISSN 1674-1617
CN 11-5660/TL

中国核电

CHINA NUCLEAR POWER



ISSN 1674-1617



9 771674 161083

中国核工业集团公司 主管
中国原子能出版社 主办

万方数据

目次



◆ 核电专访

我国第三代核电建设居世界之首

叶奇蓁 98

◆ 核电研发

核安全三级仪表截止阀的国产化研制

郭雅山, 顾春燕, 史东亮 99

核级应急柴油机的国产化方案

魏邦华 104

一回路放射性液体在线监测系统设计

章爱平, 赵卫军, 孙元君 109

CPR1000核电厂模块化技术研究

鲁勤武, 赵淑昱, 李 轶, 等 113

◆ 核电技术

核电厂超声波流量计在主给水流量测量中的应用

居法立, 陈远伦, 陶佳林 118

核主泵转子屏蔽套精密真空蠕变热胀形技术

朱 智, 张立文, 周平镇, 等 124

◆ 核电建设

核电厂调试工期的优化方案

侯刚连, 李春跃 128

AP1000钢制安全壳拼装焊接变形控制

兰学文, 周少丽 134

◆ 核电运营

设备剩余寿命监测系统在田湾核电站的应用

欧阳钦, 周正平, 茆秋华 140

秦山二期反应堆冷却剂泵现场动平衡试验

肖孝锋, 肖 建 145



核电管理 ◆

EPC模式下核电项目业主的工程质量管理

徐 晖, 胡 淼 150

AP1000核电技术自主化和标准化运作模式

高志虎, 程慧平 156

从不同燃料循环模式分析快堆燃料循环的经济性

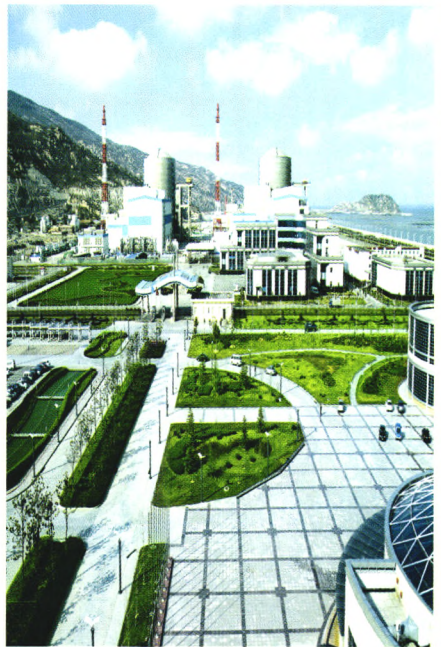
丁晓明 160

中国实验快堆调试管理

吕兆福, 马勇刚, 乔晋红 168

AP1000核岛设计管理分析

江飞舟 173



青年论坛 ◆

孤岛型650 MW核电机组大修规划和优化的技术研究

潘春娱, 余 迎 177

如何在核电前期开发工作中落实《核安全规划》的具体要求

薛亚斌, 崔绍章, 潘风国, 等 182

核电厂SRCM分析及可靠性数据库平台

李艳良, 刘丙月, 高建勇, 等 186



核电资讯 ◆

国内特别报道 190

国外最新消息 192



[期刊基本参数] CN 11-5660/TL*2008*q*A4*96*zh*P*30.00*4500*18*2014-06

CONTENTS



Exclusive Interview on Nuclear Power

China's Third-generation Nuclear Power Construction Ranks First in the World

YE Qi-zhen 98

Nuclear Power R&D

Localization of Block Valve for Nuclear Safety Class 3 Instrument

GUO Ya-shan, GU Chun-yan, SHI Dong-liang 99

Status and Countermeasures for Localization of Safety Class

Emergency Diesel Generator

WEI Bang-hua 104

Design of On-line Liquid Monitoring System in Nuclear Power Plant

ZHANG Ai-ping, ZHAO Wei-jun, SUN Yuan-jun 109

Study on Modular Technology Based on the Reference Nuclear

Power Plant

LU Qin-wu, ZHAO Shu-yu, LI Yi, et al. 113

Application of Ultrasonic Flow Meter in Flow Measurement for the

Main Feedwater of Sanmen Nuclear Power Plant

JU Fa-li, CHEN Yuan-lun, TAO Jia-lin 118

Precision Vacuum Creep Hot Bulge Forming Technique of Reactor

Coolant Pump Rotor Can

ZHU Zhi, ZHANG Li-wen, ZHOU Ping-zhen, et al. 124

Optimization of the Commissioning Period of Nuclear Power Plant

HOU Gang-lian, LI Chun-yue 128

Deformation Control in Assembly and Welding of AP1000

Containment Vessel

LAN Xue-wen, ZHOU Shao-li 134

Nuclear Power Construction

Application of Monitoring System of Residual Cyclic Resource of

Equipment in Tianwan NPP

OUYANG Qin, ZHOU Zheng-ping, MAO Qiu-hua 140

Dynamic Balancing Test on the Site of Reactor Coolant Pump

in Qinshan II

XIAO Xiao-feng, XIAO Jian 145

Nuclear Power Operation



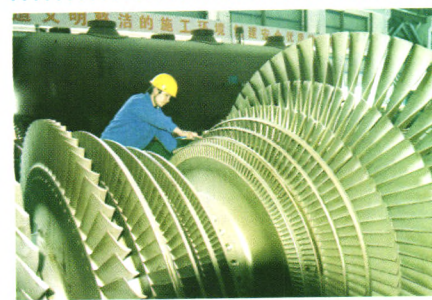
Nuclear Power Management

Project Quality Management under EPC Mode by the Owner of Nuclear Power Plant XU Hui, HU Miao	150
Study on the Operation Mode for Indigenization and Standardization of AP1000 Technology GAO Zhi-hu, CHENG Hui-ping	156
Economic Analysis of Fast Reactor Fuel Cycle with Different Modes DING Xiao-ming	160
Commissioning Management for CEFR LV Zhao-fu, MA Yong-gang, QIAO Jin-hong	168
Study and Practice on NI Design Management of the First AP1000 Plant JIANG Fei-zhou	173



Youth Forum

The Research of Planning and Optimization of Outage for Isolated Island Type 650 MW Nuclear Power Units PAN Chun-yu, YU Ying	177
Implementing National Nuclear Safety Plan at the Preliminary Stage of Nuclear Power Project Development XUE Ya-bin, CUI Shao-zhang, PAN Feng-guo, et al.	182
Nuclear Power Plant SRCM Analysis and Reliability Maintenance Database Platform Based on the B/S Structure LI Yan-liang, LIU Bing-yue, GAO Jian-yong, et al.	186



Nuclear Power Information

Domestic Special Report	190
Latest Foreign News	192



[Serial parameters] CN 11-5660/TL*2008*q*A4*96*zh*P*30.00*4500*18*2014-06

中国核电

CHINA NUCLEAR POWER

2014年6月第7卷第2期 (总第26期)

(季刊 2008年创刊)

主 管: 中国核工业集团公司

主 办: 中国原子能出版社

主 编: 俞培根

出版发行: 《中国核电》杂志社

发行范围: 国内外公开发刊

联 系 人: 卫广刚, 王丹, 曹晨, 韩霞
(北京市海淀区阜成路43号 邮编100048)

电 话: (010)88828674; 88828694

传 真: (010)88828694; 68462459

E-mail: zgghd2008@sina.com

印 刷: 保定市中画美凯印刷有限公司

国内发行: 全国各地邮局

邮发刊号: 80-910

国外发行: 中国国际图书贸易总公司
(北京市399信箱, 邮编100044)

Jun. 2014 Vol.7 No.2(Sum No.26)

(Quarterly, First started in 2008)

Under the auspices of China National Nuclear Corporation

Sponsored by China Atomic Energy Press

Editor-in-chief: YU Pei-gen

Published and issued by Periodical Office of China Nuclear Power

Public issue both at home and abroad

Contacts: WEI Guang-gang, WANG Dan, CAO Chen, HAN Xia
(No.43, Fucheng Road, Haidian District, Beijing 100048, China)

Tel: (8610)88828674; 88828694

Fax: (8610)88828694; 68462459

E-mail: zgghd2008@sina.com

Printed by Zhonghuameikai Printing Co., Ltd., Baoding

Distributed Inland by Local Post Offices

Postal Issue No.80-910

Distributed Abroad by China International Book
Trading Corporation

(P.O.Box 399, Beijing 100044, China)

中国标准刊号: ISSN 1674-1617
CN 11-5660/TL

2014年6月出版

国内定价: 30.00元 国外定价: 15.00美元