

第1期
2015

第8卷 第1期 Vol.8 No.1

ISSN 1674-1617
CN 11-5660/TL

中国核電

CHINA NUCLEAR POWER



ISSN 1674-1617

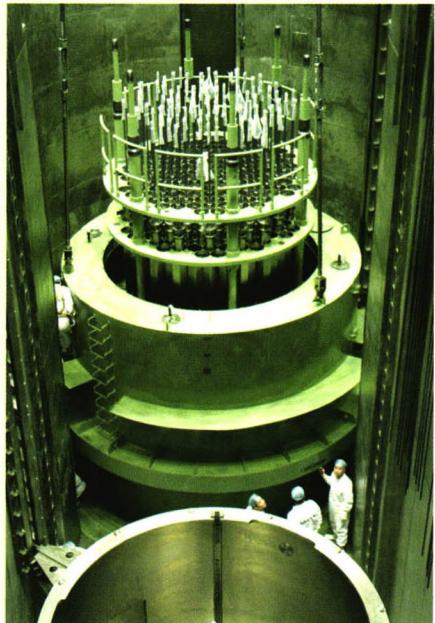


03>

9 771674 161083

中国核工业集团公司 主管
中国原子能出版社 主办

目 次



◆ 核电专访

我国核电仪控系统的自主化之路

叶奇蓁 2

◆ 核电研发

模块式小型堆硼反馈模拟方法研究

杨帆, 李峰, 冉旭, 等 5

核电厂跌落井结构设计分析

王芳, 侯树强 10

AP1000冷却剂回路主管道流场分析

夏栓, 徐臻 14

AP1000汽轮发电机组甩负荷试验研究

吴文超, 王子奇 19

◆ 核电技术

核电厂辅助给水系统除氧器设计

董建国, 周霞, 雷勇侠 24

AP1000氢气管道设计分析

梅健 29

田湾核电站凝汽器真空系统板式热交换器缺陷及处理

杨冬 34



◆ 核电建设

蛇纹石混凝土在田湾核电站的实验与应用

王开华, 钱伏华 38

BOP工程防冻伴热施工管理

王立宁, 李景民, 马丁, 等 42



核电管理 ◆

田湾核电站一期支吊架整改中的采购管理

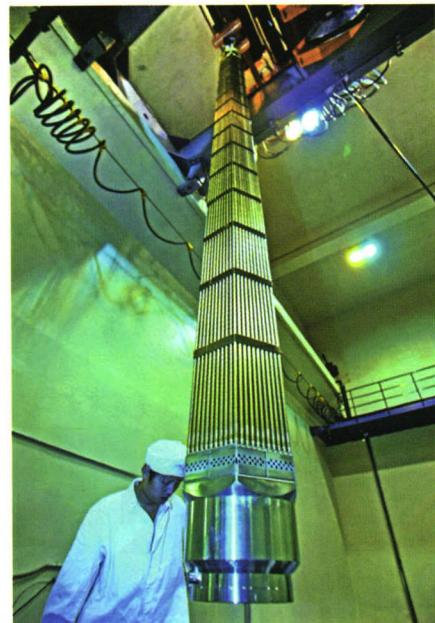
金家东 47

三门核电项目建设阶段设计进度管理与协调

李 拓, 赵徐军, 张庆炽 51

EPC模式下核电厂可行性研究阶段设计的管理

王志强 59



核电运营 ◆

大型汽轮发电机定子绕组端部模态试验与分析

唐芳轩, 张 剑, 陈景荣, 等 64

核电厂运行准备与实践

吴雪松, 卢铁忠 70



核电机组二回路主蒸汽隔离阀螺栓“咬死”原因分析

胡明磊, 张 维, 罗坤杰, 等 75

青年论坛 ◆

核电企业计划预算考核一体化系统建设

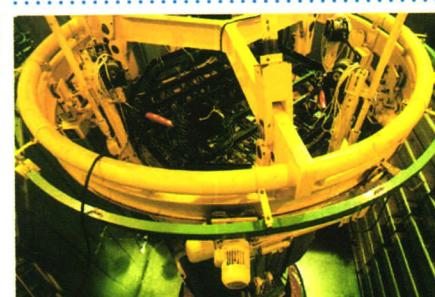
李 娟 79

AP1000机组RCS移交前施工关键路径分析

李洪昌, 曾 励, 邹 玮, 等 84

核电企业商业秘密保护模式

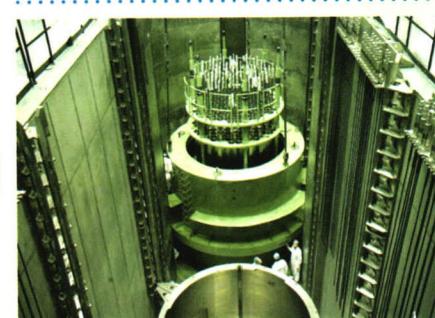
曾 斌 89



核电资讯 ◆

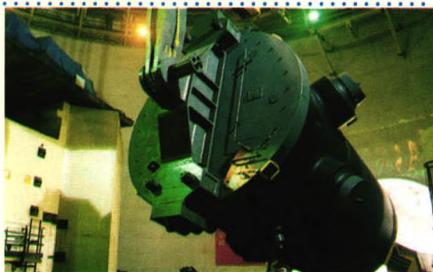
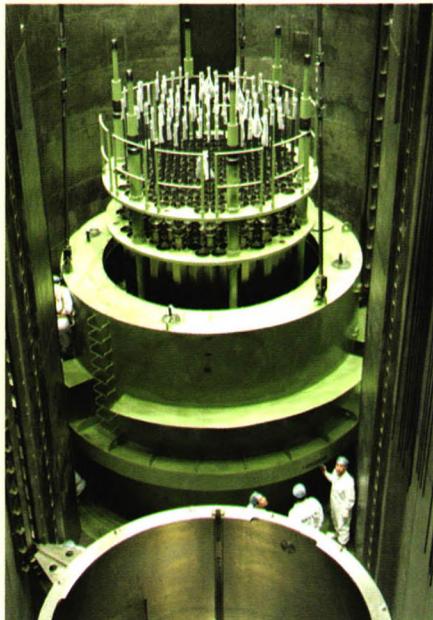
国内特别报道 94

国外最新消息 96



[期刊基本参数] CN 11-5660/TL*2008*q*A4*96*zh*P*30.00*4500*18*2015-03

CONTENTS



Exclusive Interview on Nuclear Power

Self-development of Nuclear Power I&C System

YE Qi-zhen 2

Nuclear Power R&D

Study on SMR Boron Reactivity Feedback and Simulation Method

YANG Fan, LI Feng, RAN Xu, et al. 5

Structure Design of Water Discharge Surge Tank of Nuclear Power Plant

WANG Fang, HOU Shu-qiang 10

Analysis on AP1000 Reactor Coolant Loop Piping Flow Field

XIA Shuan, XU Zhen 14

Analysis of Turbine Load Shedding Test for AP1000 Nuclear Power Plant

WU Wen-chao, WANG Zi-qi 19

Nuclear Power Technology

Introduction to Deaerator in Auxiliary Water Supply System of Nuclear Power Plant

DONG Jian-guo, ZHOU Xia, LEI Yong-xia 24

Design Analysis for AP1000 Hydrogen Piping System

MEI Jian 29

Defects and Treatment of the Plate Heat Exchanger of the Condenser Vacuum System in Tianwan Nuclear Power Plant

YANG Dong 34

Nuclear Power Construction

Serpentine Concrete in the Experiment and Application of Tianwan Nuclear Power Station

WANG Kai-hua, QIAN Fu-hua 38

The Research of Electrical Tracing System Construction

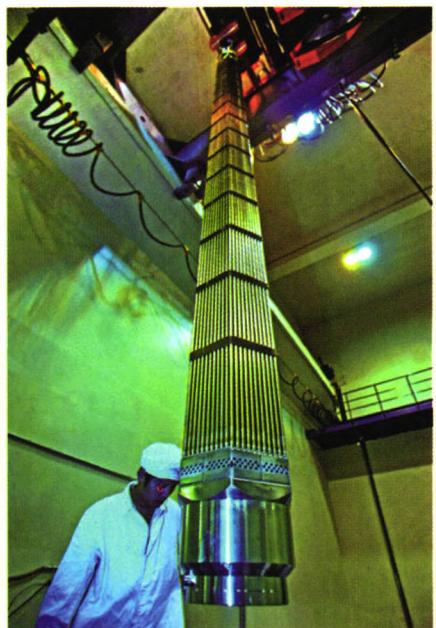
Management and Related Questions of BOP Project

WANG Li-ning, LI Jing-min, MA Ding, et al. 42

Nuclear Power Management

- Procurement Management for Modification of Supports and Hangers in Tianwan Nuclear Power Station Phase I
JIN Jia-dong 47

- Engineering Schedule Management and Coordination in the Construction of Sanmen Nuclear Power Plant
LI Tuo, ZHAO Xu-jun, ZHANG Qing-chi 51

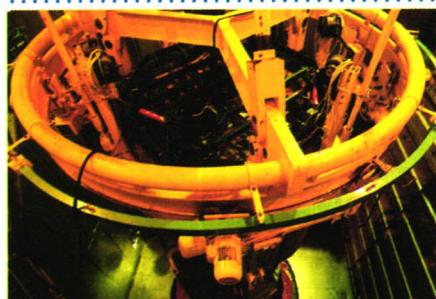


Nuclear Power Operation

- Modal Test and Analysis on Stator End-windings of Large Turbo-generator
TANG Fang-xuan, ZHANG Jian, CHEN Jing-rong, et al. 64



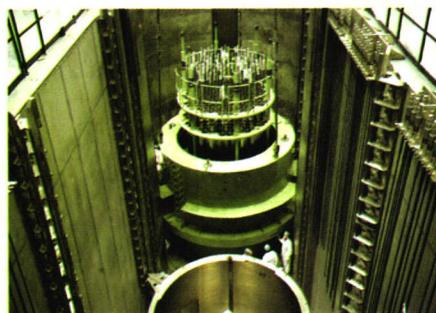
- Preparation and Practice for Nuclear Power Plant Operation
WU Xue-song, LU Tie-zhong 70
- Cause Analysis of an Scuffed Bolt of Main Steam Isolation Valve
HU Ming-lei, ZHANG Wei, LUO Kun-jie, et al. 75



Youth Forum

- Discussion on the Construction of an Integrated System of Plan Budget and Performance Evaluation in Nuclear Power Companies
LI Juan 79

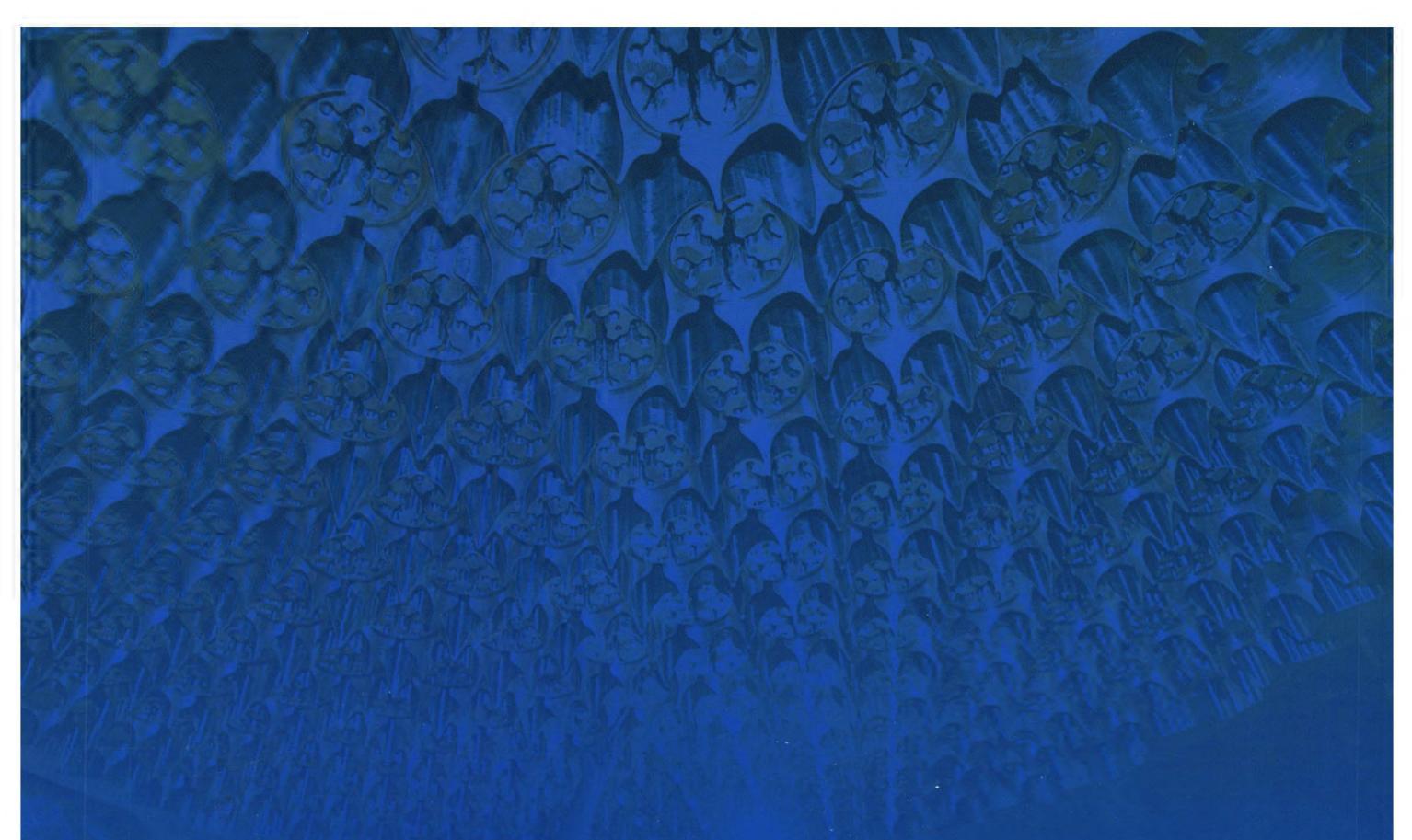
- The Analysis of the Critical Construction Path Prior to Turning over of Reactor Coolant System in AP1000 Plant
LI Hong-chang, ZENG Xun, ZOU Wei, et al. 84



Nuclear Power Information

- Domestic Special Report 94
- Latest Foreign News 96

[Serial parameters] CN 11-5660/TL*2008*q*A4*96*zh*P*30.00*4500*18*2015-03



中国核电

CHINA NUCLEAR POWER

2015年3月第8卷第1期（总第29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：国内外公开发行

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：zghd2008@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)

Mar. 2015 Vol.8 No.1(Sum No.29)

(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: zghd2008@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

2015年 3月出版

国内定价: 30.00 元 国外定价: 15.00 美元