

A

中国先进研究堆功率调节系统仿真分析

@曾海\$中国原子能科学研究院反应堆工程研究设计所!北京 102413

收稿日期 2003-2-25 修回日期 网络版发布日期:

摘要 基于SIMULINK仿真平台,建立中国先进研究堆功率调节闭环系统的仿真模型,通过计算反应性扰动下的堆功率响应,了解系统的稳定特性、调节品质和闭环系统各部件对系统的影响。系统仿真表明:闭环系统不仅能很好地克服反应性扰动,又具有良好的随动特性。

关键词 [SIMULINK](#) [功率调节](#) [仿真](#)

分类号 [TL362](#)

Simulation Analysis of Power Regulation System of China Advanced Research Reactor

ZENG Hai (China Institute of Atomic Energy, P. O. Box 275-33, Beijing 102413, China)

Abstract Based on the simulation flat-SIMULINK, the simulation model of Power Regulating System (PRS) of China Advanced Research Reactor is built up. By computing the reactor power response to reactivity disturb, the information on the system stability, the regulating quality, and the effect of parts on the whole close loop system can be (obtained). System simulation indicates that the close loop system not only is capable of overcoming the reactivity disturb, but also has good fixed value following characteristic.

Key words [SIMULINK](#) [power regulation](#) [simulation](#)

DOI

通讯作者

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [\[PDF全文\]\(339KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“SIMULINK”的相关文章](#)
- ▶ [本文作者相关文章](#)