

PWR热工水力实验研究中的模拟问题

@陈炳德\$西南反应堆工程研究设计院!成都

收稿日期 1989-3-7 修回日期 网络版发布日期:

摘要 文章对常用的模拟方法、国外已建成的大型实验装置存在的模拟问题及模拟失真对计算程序的影响作了简单介绍,并对如何避免和减少这种影响提出了建议。

关键词 [压水堆](#) [热工水力实验](#) [模拟](#)

分类号

THE MODELING PROBLEMS IN PWR THERMAL AND HYDRAULIC TEST RESEARCH

CHEN BINGDE South-West Center for Reactor Engineering Research and Design, Chengdu

Abstract The experimental results obtained in scaled thermo-hydraulic test facilities can provide basic data and correlations for design, operation and safety evaluation of PWR system, and verify the corresponding models used in computer codes. A scale test facility may induce modeling distortion due to improper modeling methods, incomplete design considerations, technological difficulties and some other reasons. Thus, the accuracy of the experimental results may be affected. However, for a certain test facility used for some special experiment projects its modeling distortion can not only be minimized but also predicted and modified quantitatively. In order to reduce the distortion, it is necessary to do more effective research into the simulating methods. It is an important task to carry out some relevant experiments for verifying if the experimental results and the codes are affected by the distortion of the test facility and for determining how to eliminate this effect. The simulating methods in common use, the modeling problems existing in large test facilities in the world and the effects of modeling distortion on computer codes are briefly described in this paper. An approach of how to avoid and/or reduce the distortion is proposed.

Key words [PWR](#) [Thermal and hydraulic test](#) [Modeling](#)

DOI

通讯作者

扩展功能

本文信息

▶ [Supporting info](#)

▶ [\[PDF全文\]\(589KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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“压水堆”的相关文章](#)

▶ [本文作者相关文章](#)