

反应堆工程

反应堆启动反应性添加程序优化研究

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摘要 根据实际启动经验, 运用RETRAN-02系统瞬态分析程序, 就反应堆在启动过程中的反应性添加程序进行了分析、计算, 提出通过合理的反应性添加程序可适当缩短等待时间, 加大每次反应性的添加量, 减少提棒次数。这样既可保证大盲区启动过程的安全, 又有很高的效率, 减轻了操作人员的工作强度, 缩短了启动时间。对今后制定反应堆启动的反应性添加程序、安全实施启动有一定的参考作用。

关键词 [反应堆](#); [物理启动](#); [反应性](#); [优化研究](#)

分类号

Optimization Study of Reactivity Accession Procedure for Reactor Start up

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Abstract According to the experience of practical start-up, analysis and calculation of reactivity accession procedure were carried out for start-up on the reactor by transient analysis code RETRAN-02. Then a reasonable reactivity accession procedure was put forward. The latency time could be shortened and the rod-lift times could be reduced by increasing reactivity increment. It can ensure the security of passive start-up and improve working efficiency. The working intensity of operator was greatly lightened and the start-up time was obviously shortened. It can provide basic reference for the establishment of reactivity accession procedure for start-up on reactor and the execution of secure start-up.

Key words [reactor](#) _ [physics](#) [start-up](#) _ [reactivity](#) _ [optimization](#) [study](#)

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