反应堆工程

压水堆严重事故下气溶胶热泳沉积规律

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摘要 通过编制程序,采用热泳沉积模型,计算严重事故工况下不同温度、压力、粒径时安全壳内气溶胶的热泳沉积效率。通过分析,可针对性地采取措施降低安全壳内壁面的温度,提高气溶胶的热泳沉积效率,增强反应堆的安全性能。

关键词 严重事故 气溶胶 热泳沉积

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Law of Aerosol Thermophoretic Deposition at Severe Accidents

of Pressurized Water Reactor

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Abstract By programming, and using thermophoretic deposition model, the thermophoretic deposition efficiency of the aerosol inside the containment, under various temperatures, pressures and particles diameter during severeaccidents of the pressurized water reactor was calculated. Through analysis, measurements are taken pertinently to depress the temperature of the inside wall of the containment, advance the thermophoretic deposition efficiency, and enhance the safety performance of the reactor at last.

Key words severe accident _ aerosol _ thermophoretic deposition

DOI

扩展功能

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