The Analysis and Simulation of TRACE in the Ultimate Response Guideline for Chinshan BWR/4 Nuclear Power Plant

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Abstract: In this research, TRACE model of Chinshan BWR/4 Nuclear Power Plant (NPP) has been developed for the simulation and analysis of Ultimate Response Guideline (URG). The main actions of URG are the depressurization and low pressure water injection of reactor and containment venting. This research focuses to verify the URG efficiency under Fukushima-like conditions. Trace analysis results show that the URG can keep the PCT below the criteria 1088.7 K under Fukushima-like conditions. It indicated that Chinshan NPP was safe.

Keywords: BWR, trace, safety analysis, URG

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