

## عنوان مقاله:

Uncertainty Analysis for Success Criteria Calculations in PRA Level-1

## محل انتشار:

چهارمین کنفرانس بین المللی مهندسی قابلیت اطمینان (سال: 1395)

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## خلاصه مقاله:

In the context of Probabilistic Risk Assessment (PRA) level-1, success criteria is defined as minimum requirement of the system for mitigation of an accident. The methodologies for success criteria analysis are constructed on deterministic evaluation of the system response to a postulated accident and probabilistic interpretation of the results for PRA needs. PRA success criteria s uncertainty, originates from different sources. Uncertainty analysis in complex system models like MELCOR requires a comprehensive treatment of different types and sources of uncertainties. The main purpose of this paper is to quantify the uncertainty of the success criteria analysis due to these sources for a typical 2-loop pressurized water reactor. The selected accident is large break large loss of coolant accident (LOCA) because of its significance in the safety of nuclear power plants. The code calculated results are plotted for peak clad temperature variable as the output of interest in success criteria analysis. 99 cases out of a total of 100 were below the PCT limit of 1204°C which is the acceptance criterion of the problem. This confirms that 99% of the calculations .are below the acceptance criterion

## کلمات کلیدی:

,Success Criteria Analysis, Uncertainty

## لینک ثابت مقاله در پایگاه سیویلیکا:

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