



# IEEE Standard Requirements for Reliability Analysis in the Design and Operation of Safety Systems for Nuclear Power Generating Stations and Other Nuclear Facilities

IEEE Power and Energy Society

Developed by the  
Nuclear Power Engineering Committee

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# **IEEE Standard Requirements for Reliability Analysis in the Design and Operation of Safety Systems for Nuclear Power Generating Stations and Other Nuclear Facilities**

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**Nuclear Power Engineering Committee**  
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**Abstract:** The minimum acceptable requirements for the performance of reliability analyses for safety systems when used to address the reliability considerations discussed in industry standards and guidelines are set forth in this standard. The requirement that a reliability analysis be performed does not originate with this standard. However, when reliability analysis is used to demonstrate compliance with reliability requirements, this standard describes an acceptable response to the requirements.

**Keywords:** IEEE 577™, nuclear facilities, reliability analysis, safety systems

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