1. Record Nr. UNINA9910299820603321

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Titolo	Risk Management of Non-Renewable Energy Systems / / by Ajit Kumar Verma, Srividya Ajit, Hari Prasad Muruva
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-16062-1
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (436 p.)
Collana	Springer Series in Reliability Engineering, , 1614-7839
Disciplina	621.042
Soggetti	Nuclear energy Quality control Reliability Industrial safety Manufactures Statistics Nuclear Energy Quality Control, Reliability, Safety and Risk Manufacturing, Machines, Tools, Processes Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Basics of Reliability -- Risk Analysis of Nuclear Power Plants -- Seismic PSA of Nuclear Power Plants -- Reliability Analysis of Passive Systems -- Time Variant Reliability Analysis -- Risk Management.
Sommario/riassunto	This book describes the basic concepts of risk and reliability with detailed descriptions of the different levels of probabilistic safety assessment of nuclear power plants (both internal and external). The book also maximizes readers insights into time dependent risk analysis through several case studies, whilst risk management with respect to non renewable energy sources is also explained. With several advanced reactors utilizing the concept of passive systems, the reliability estimation of these systems are explained in detail with the book

providing a reliability estimation of components through mechanistic model approach. This book is useful for advanced undergraduate and post graduate students in nuclear engineering, aerospace engineering, industrial engineering, reliability and safety engineering, systems engineering and applied probability and statistics. This book is also suitable for one-semester graduate courses on risk management of non renewable energy systems in all conventional engineering branches like civil, mechanical, chemical, electrical and electronics as well as computer science. It will also be a valuable reference for practicing engineers, managers and researchers involved in reliability and safety activities of complex engineering systems.