

1. Record Nr.	UNINA9910299477903321
Autore	Dhillon B. S
Titolo	Human reliability, error, and human factors in power generation // B.S. Dhillon
Pubbl/distr/stampa	Cham [Switzerland] : , : Springer, , 2014
ISBN	3-319-04019-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (xiv, 188 pages) : illustrations
Collana	Springer Series in Reliability Engineering, , 1614-7839
Disciplina	620.82
Soggetti	Human engineering Human-machine systems Errors - Prevention Reliability (Engineering) Fallibility Electric power-plants - Maintenance and repair - Quality control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 1614-7839."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Introduction -- 2. Basic Mathematical Concepts -- 3. Basic Human Factors, Reliability, and Error Concepts -- 4. General Methods for Performing Human Reliability and Error Analysis in Power Plants -- 5. Specific Human Reliability Analysis Methods for Nuclear Power Plants -- 6. Human Factors in Power Generation -- 7. Human Error in Power Generation -- 8. Human Factors in Control Systems -- 9. Human Factors in Power Plant Maintenance -- 10. Human Error in Power Plant Maintenance -- 11. Mathematical Models for Performing Human Reliability and Error Analysis in Power Plants.
Sommario/riassunto	Human reliability, error, and human factors in the area of power generation have been receiving increasing attention in recent years. Each year billions of dollars are spent in the area of power generation to design, construct/manufacture, operate, and maintain various types of power systems around the globe, and such systems often fail due to human error. This book compiles various recent results and data into one volume, and eliminates the need to consult many diverse sources to obtain vital information. It enables potential readers to delve deeper into a specific area, providing the source of most of the material

presented in references at the end of each chapter. Examples along with solutions are also provided at appropriate places, and there are numerous problems for testing the reader's comprehension. Chapters cover a broad range of topics, including general methods for performing human reliability and error analysis in power plants, specific human reliability analysis methods for nuclear power plants, human factors in control systems, and human error in power plant maintenance. They are written in such a manner that the potential reader requires no previous knowledge to understand their contents. "Human Reliability, Error, and Human Factors in Power Generation" will prove useful to many individuals, including engineering professionals working in the power generation industry, researchers, instructors, and undergraduate and graduate students in the field of power engineering.
