1. Record Nr. UNINA9910966770403321

Titolo	Current approaches to the analysis of design extension conditions with core melting for new nuclear power plants / / International Atomic Energy Agency
Pubbl/distr/stampa	Vienna, Austria : , : International Atomic Energy Agency, , 2021
ISBN	9789201338211 920133821X 9781523149933 1523149930 9781523149940 1523149949 9789201339218 9201339216
Edizione	[1st ed.]
Descrizione fisica	1 online resource (128 pages)
Collana	IAEA TECDOC series, , 1011-4289 ; ; no. 1982
Disciplina	621.48/32
Soggetti	Nuclear power plants - Design and construction Nuclear power plants - Safety measures Nuclear reactors - Cores
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	The focus of this publication is on collecting current practices in Member States related to design extension conditions (DECs) with core melting. The information provided is based on the feedback from technical experts from Canada, France, Finland, India, the Islamic Republic of Iran, the Russian Federation, and the United States of America. There is, however, still no common understanding of DECs due to the complexity of phenomena and insufficient experimental data. This publication identifies current approaches of IAEA Member States with active nuclear power programmes and discusses the regulatory perspective and technical rationale. It attempts to find common practices and possible areas for harmonization of the main

rules related to the analysis of DECs with core melting for new water cooled reactors, including their selection for the safety demonstration.