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Sommario/riassunto	For more than 40 years, IPSN then IRSN has conducted research and development on nuclear safety, specifically concerning pressurized water reactors, which are the reactor type used in France. This publication reports on the progress of this research and development in each area of study - loss-of-coolant accidents, core melt accidents, fires and external hazards, component aging, etc. -, the remaining uncertainties and, in some cases, new measures that should be

developed to consolidate the safety of today's reactors and also those of tomorrow. A chapter of this report is also devoted to research into human and organizational factors, and the human and social sciences more generally. All of the work is reviewed in the light of the safety issues raised by feedback from major accidents such as Chernobyl and Fukushima Daiichi, as well as the issues raised by assessments conducted, for example, as part of the ten-year reviews of safety at French nuclear reactors. Finally, through the subjects it discusses, this report illustrates the many partnerships and exchanges forged by IRSN with public, industrial and academic bodies both within Europe and internationally. This publication reflects IRSN's desire to keep an enduring record of its results and to share its knowledge.