The Economics and Uncertainties of Nuclear Power

Is nuclear power a thing of the past or a technology for the future? Has it become too expensive and dangerous, or is it still competitive and sufficiently safe? Should emerging countries invest in it? Can we trust calculations of the probability of a major nuclear accident? In the face of divergent claims and contradictory facts, this book provides an in-depth and balanced economic analysis of the main controversies surrounding nuclear power. Without taking sides, it helps readers gain a better understanding of the uncertainties surrounding the costs, hazards, regulation and politics of nuclear power. Written several years on from the Fukushima Daiichi nuclear disaster of 2011, this is an important resource for students, researchers, energy professionals and concerned citizens wanting to engage with the continuing debate on the future of nuclear power and its place in international energy policy.

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Abbreviations

ANRE Agency for Natural Resources and Energy (Japan)
ASN Autorité de Sûreté Nucléaire
CEA Commissariat à l'Energie Atomique
EDF Electricité de France
Enreg European Nuclear Safety Regulation Group
EPR European Pressurized Reactor
GDP Gross Domestic Product
IAEA International Atomic Energy Agency
INES International Nuclear Event Scale
INPO Institute of Nuclear Power Operations
IRRS International Regulatory Review Service
IRSN Institut de Radioprotection et de Sûreté Nucléaire
JNES Japan Nuclear Energy Safety Organization
MIT Massachusetts Institute of Technology
NPT Treaty on the Non-Proliferation of Nuclear Weapons
NRC Nuclear Regulatory Commission
NSC Nuclear Safety Commission (Japan)
NSG Nuclear Suppliers Group
OECD Organisation for Economic Cooperation and Development
UAE United Arab Emirates