

## Nuclear Nonproliferation

**The Nuclear Suppliers and Nonproliferation.** International Policy Choices. RODNEY W. JONES, CEMARE MERLINI, JOSEPH F. PELAT, and WILLIAM C. POTTER, Eds. Lexington (Heath), Lexington, MA, 1985. xvi, 255 pp. \$32. From a seminar, Washington, DC, June 1984.

**The Nuclear Connection.** A Reassessment of Nuclear Power and Nuclear Proliferation. ALVIN WEINBERG, MARCELO ALONSO, and JACK N. BARKENBUS, Eds. Paragon House, New York, 1985. viii, 295 pp., illus. \$27.95; paper, \$19.95. A Washington Institute Book.

The recent conclusion of the third review conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is a timely occasion for a reevaluation of international efforts to impede the spread of nuclear weapons to additional countries, which continues to be one of the most critical challenges to international security. Though the books being reviewed largely cover old ground, they provide new perspectives on certain nuclear supply questions and on the relationship between civil nuclear electric generation and nuclear weapons and thus contribute to the large body of literature on this important subject.

*The Nuclear Suppliers and Nonproliferation* provides new insights into the growing problem of "second tier" or emerging suppliers, those states that have recently become capable of supplying nuclear materials, equipment, or technology. The best paper on the subject, by Lewis Dunn, puts a potentially serious problem in perspective, eschewing the alarmist view. Some commentators have predicted that the new suppliers will undermine international efforts to assure that exported nuclear materials are only used for peaceful purposes by making exports that are not subject to international controls. To date, Third World countries with advanced nuclear programs, such as India, have been fairly circumspect in their nuclear dealings with other countries. Moreover, progress has been made recently in getting some emerging suppliers to require that their nuclear exports meet international standards. South Africa (which has vast uranium reserves and a uranium enrichment plant) has announced that it will require the same controls on its nuclear exports as are required by the existing members of the "London Suppliers Group." China has also recently announced that it will require international inspection under the "safeguards" system of the International Atomic Energy Agency on all its nuclear exports, a welcome development if China actually matches those

words with more responsible behavior in its nuclear commerce than it has shown in the recent past.

The book also contains good regional overviews of nuclear supply issues in South Asia, by Rodney Jones, and in Latin America, by Daniel Poneman. Poneman's paper contains a useful proposal for greater reliance on the Latin American nuclear-free-zone treaty (the Treaty of Tlatelolco) to reduce proliferation risks on that continent. The papers in the book on national export policies are self-congratulatory and contain little that is new. An exception is a paper on the Canadian perspective by Mark Moher, with its lucid advocacy of a policy of genuine "full-scope" IAEA safeguards (that is, a requirement that as a precondition of nuclear cooperation the recipient state must enter into a treaty obligation to place all its nuclear facilities under IAEA safeguards). Moher points out the risks of reliance on ad hoc policies and emphasizes the dangers of supplying nuclear materials and equipment with the hope, but without binding assurances, that the recipient nation will forgo nuclear weapons.

Disappointingly, the book only mentions in passing the recent negotiation of major improvements in the international "trigger lists." These lists specify the items that cannot be exported unless the supplier has received assurances that IAEA safeguards will be applied. The elaboration of the trigger lists to deal more effectively with centrifuge uranium enrichment and spent fuel reprocessing technologies is a major accomplishment of which the United States and other concerned governments should be proud. Though obvious limits are imposed by confidentiality, some details of these negotiations would have provided a valuable case study of the need for supplier cooperation to prevent the establishment of unsafeguarded sensitive nuclear facilities, and of the practical and political limits on such cooperation. There are similarly no details on new issues concerning the control of supplies, such as "dual-use" technologies, heavy-water production, and advanced uranium enrichment technologies. For a book on nuclear supply issues, these are serious lapses.

Similarly, despite excellent but brief overviews by Charles Van Doren and Joseph Nye, which point out some of the policy complexities of nuclear supply issues, and a thoughtful presentation of the nuclear industry's perspective by Myron Kratzer, there is relatively little attempt to develop a theory of supplier controls. Such controls can delay but cannot ultimately prevent indigenous development of nuclear facilities that might contribute to a nuclear weapons program.

Supplier controls have value primarily if they are used to induce prospective recipients to agree to nonproliferation measures such as adherence to the NPT or the Treaty of Tlatelolco. Supplier controls have effectively induced such agreement in numerous cases in the past. Alternatively, supplier controls can force delays in unsafeguarded programs, particularly those involving sensitive technologies. The partial success of concerted efforts by the nuclear suppliers to deny parts to Pakistan's unsafeguarded centrifuge enrichment and reprocessing programs demonstrates that such cooperation can indeed cause delays and thus buy valuable time during which positive political measures or sanctions can be brought to bear.

The intended common theme of *The Nuclear Connection* is "nuclear power's potential linkage to weapons production." Most observers have long rejected the two extreme positions on the relationship between the two: that nuclear power is tantamount to weapons proliferation or that nuclear power has nothing to do with nuclear weapons. The relationship was discussed ad nauseam during the International Nuclear Fuel Cycle Evaluation, and the book adds relatively little to INFCE's conclusions. The book would have been greatly improved by case studies analyzing the countries that are currently thought to pose dangers of proliferation—something INFCE did not do. Such country-specific case studies would demonstrate that in the past 30 years nuclear material and facilities obtained for ostensibly peaceful purposes have contributed directly to known or suspected nuclear weapons programs in certain countries but not to those in other countries; that the existence of legitimate nuclear power programs has sometimes served as a "cover" for the acquisition of other technologies that are intended for nonpeaceful purposes; and that expertise developed in certain nominally peaceful programs (for example, in plutonium handling and chemistry) can be useful in but is not sufficient for the development of a weapons program.

A paper on the commercial prospects of nuclear power by Peter Aver, Marcelo Alonso, and Jack Barkenbus demonstrates a new realization, uncommon as recently as INFCE, that as a result of increased finds of uranium and reductions in demand for it, there is enough uranium to run 1000 reactors of 1000 megawatt electrical output for 50 years. This gives the international community additional time, perhaps several decades, before relatively more dangerous activities such as the reprocessing and recycling of plutonium could be justified on economic grounds.

# Nuclear Suppliers And Nonproliferation International Policy Choices

**Duane Bratt**



## **Nuclear Suppliers And Nonproliferation International Policy Choices:**

The Nuclear Suppliers and Nonproliferation Rodney W. Jones, 1985      *The Nuclear Non-Proliferation Regime* Raju G.C. Thomas, 2016-07-27 Leading international security scholars and policy advisors from universities think tanks and nuclear weapons laboratories in the United States analyze the future of nuclear weapons proliferation In April 1995 the earlier 1970 Nuclear Non Proliferation Treaty was renewed indefinitely and without change to the original clauses of the treaty The authors examine the continuing relevance or irrelevance of the old treaty the role of coercive sanctions in enforcing restraint and the impact of biological chemical and missile proliferation on the nuclear motives and ambitions of various states Attention is given to proliferation conditions in the former Soviet republics East and South Asia and the Middle East      **The Future of the Non-Proliferation Treaty** Darryl Howlett, John Simpson, 2016-07-27 In 1995 a Conference is to be convened to review and extend the Treaty on the NonProliferation of Nuclear Weapons NPT The Future of the NPT brings together a distinguished group of individuals including the elected President of the 1995 NPT Conference to analyse four crucial agenda areas relevant to the Conference the preConference activities to be undertaken by both States Parties and the Conference Secretariat those security issues that relate to a review of the treaty such as nuclear disarmament and security assurances peaceful uses and verification questions and regional issues With nuclear nonproliferation currently occupying a prominent position on the international security agenda the 1995 Conference offers a unique opportunity for a constructive discussion on these areas and it is hoped that this volume will provide a contribution to that end      **The EU and the Non-Proliferation of Nuclear Weapons** S. Blavoukos, D. Bourantonis, C. Portela, 2015-01-20 Much of the literature on the emerging role of the EU as a non proliferation actor has only a minimal engagement with theory This collection aims to rectify this by placing the role of the EU in the non proliferation of nuclear weapons within an analytical framework inspired by emerging literature on the performance of international organisations      **The Politics of CANDU Exports** Duane Bratt, 2006-01-01 This book provides the most comprehensive history of the export of CANDU reactors to date A pressurized heavy water natural uranium power reactor designed and marketed by Atomic Energy of Canada Limited the CANDU reactor has played a significant part in Canada s international trade In this history Duane Bratt examines every CANDU sale as well as some important unsuccessful sales attempts from 1956 to the present He also outlines the impact that changes in the international political climate such as the creation and strengthening of the international nuclear non proliferation regime and the increasing importance of human rights and environmental protection have had on CANDU exports over the last fifty years      **How Western European Nuclear Policy is Made** Harald Muller, 1991-06-18 Second in a series of comparative studies on West European non proliferation policy this book examines the factors which influence policy in this area and assesses the potential for policy convergence in the future With a multi national team of contributors this study covers 10 countries      *Nuclear Weapons Proliferation in the Next Decade* Peter Lavoy, 2020-09-23 The intensification of the Iranian

and North Korean nuclear crises has created new fears that deteriorating security conditions in the Middle East Northeast Asia and other regions will lead additional countries to seek their own nuclear arsenals in the years to come This special issue examines the factors that are likely to shape nuclear weapons proliferation over the next decade The internationally recognized authors of this issue many of whom are prominent scholars and others of whom have held influential governmental positions with responsibility for countering nuclear proliferation bring to light the conditions and events that might drive new countries to pursue nuclear weapons the indicators and cautionary signs that can provide early warning that a country is interested in building nuclear bombs and the policy and military measures that can be adopted to prevent or at least dissuade new proliferators The introductory chapter develops a novel analytical approach focusing on the role of nuclear myths and mythmakers and the subsequent chapters draw on this approach to help analysts better understand and policy makers better manage nuclear proliferation over the next ten years      *Global Nuclear Energy Risks* Bennett Ramberg, 2019-04-08 This book addresses the strategic challenges and proposes alternative international remedies set in historical and regulatory contexts that suggest that nations should increase international scrutiny of atomic power in order to minimize risks      *Nuclear Policy and National Security* Attar Chand, 1993 With special reference to India      *Exporting the Bomb* Matthew H. Kroenig, 2011-10-15 In a vitally important book for anyone interested in nuclear proliferation defense strategy or international security Matthew Kroenig points out that nearly every country with a nuclear weapons arsenal received substantial help at some point from a more advanced nuclear state Why do some countries help others to develop nuclear weapons Many analysts assume that nuclear transfers are driven by economic considerations States in dire economic need they suggest export sensitive nuclear materials and technology and ignore the security risk in a desperate search for hard currency Kroenig challenges this conventional wisdom He finds that state decisions to provide sensitive nuclear assistance are the result of a coherent strategic logic The spread of nuclear weapons threatens powerful states more than it threatens weak states and these differential effects of nuclear proliferation encourage countries to provide sensitive nuclear assistance under certain strategic conditions Countries are more likely to export sensitive nuclear materials and technology when it would have the effect of constraining an enemy and less likely to do so when it would threaten themselves In *Exporting the Bomb* Kroenig examines the most important historical cases including France's nuclear assistance to Israel in the 1950s and 1960s the Soviet Union's sensitive transfers to China from 1958 to 1960 China's nuclear aid to Pakistan in the 1980s and Pakistan's recent technology transfers with the help of rogue scientist A Q Khan from 1987 to 2002 Understanding why states provide sensitive nuclear assistance not only adds to our knowledge of international politics but also aids in international efforts to control the spread of nuclear weapons      *Bulletin of the Atomic Scientists*, 1985-09      *The Nuclear Suppliers and Nonproliferation* Rodney W. Jones, 1985      **Nonproliferation Policy and Nuclear Threshold States** Dean Martins, 1990      **International Nuclear Trade and Nonproliferation** William C. Potter, 1990      *The U.s.-canada*

*Security Relationship* David G Haglund, Joel J Sokolsky, 2019-07-09 This book focuses on the critical issues shaping the bilateral defense relationship of the U S and Canada including the future of ballistic missile defense the increased deployment of air and sea launched cruise missiles and the growing debate within Canada over security relations with the US

The New Europe ,1992      The Hegemon's Tool Kit Rebecca Davis Gibbons, 2022-07-15 At a moment when the nuclear nonproliferation regime is under duress Rebecca Davis Gibbons provides a trenchant analysis of the international system that has for more than fifty years controlled the spread of these catastrophic weapons The Hegemon s Tool Kit details how that regime works and how disastrously it might falter In the early nuclear age experts anticipated that all technologically capable states would build these powerful devices That did not happen Widespread development of nuclear arms did not occur in large part because a global nuclear nonproliferation regime was created By the late 1960s the United States and the Soviet Union had drafted the Treaty on the Non Proliferation of Nuclear Weapons NPT and across decades the regime has expanded with more agreements and more nations participating As a result in 2022 only nine states possess nuclear weapons Why do most states in the international system adhere to the nuclear nonproliferation regime The answer lies Gibbons asserts in decades of painstaking efforts undertaken by the US government As the most powerful state during the nuclear age the United States had many tools with which to persuade other states to join or otherwise support nonproliferation agreements The waning of US global influence Gibbons shows in The Hegemon s Tool Kit is a key threat to the nonproliferation regime So too is the deepening global divide over progress on nuclear disarmament To date the Chinese government is not taking significant steps to support the nuclear nonproliferation regime and as a result the regime may face a harmful leadership gap

*Global Business Regulation* John Braithwaite, Peter Drahos, 2000-02 This book confronts the question of how the regulation of business has shifted from national to global institutions Based on interviews with 500 international leaders in business and government this book examines the role played by global institutions such as the WTO IMF and the World Bank as well as various NGOs and significant individuals The authors argue that effective and decent global regulation depends on the determination of individuals to engage with powerful agendas and decision making bodies that would otherwise be dominated by concentrated economic interests      *The Koreas* ,1985      African Crisis Areas and U.S. Foreign Policy Gerald J. Bender, James Smoot Coleman, Richard L. Sklar, 1985

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