

### MOVING BEYOND PRETENSE: NUCLEAR POWER AND NONPROLIFERATION

Henry Sokolski, Editor

This five-part volume is designed to offer a counternarrative to the assumptions currently driving U.S. and international nonproliferation policies. It includes work from 13 leading experts on nuclear security and is divided into five parts. Part I, “Nuclear Proliferation Matters,” features chapters by François Heisbourg, Chairman of the International Institute for Strategic Studies; Matthew Kroenig of Georgetown University and the Council on Foreign Relations; and Matthew Fuhrmann of Texas A&M University on how the further spread of nuclear technology and weapons challenges our security. It argues that, contrary to the popular nonproliferation narrative of “Atoms for Peace,” nuclear weapons proliferation is more likely to occur with the spread of civilian nuclear technology, not the other way around.

Part II, “Nuclear Power, Nuclear Weapons—Clarifying the Links,” includes chapters by Victor Gilinsky, former U.S. Nuclear Regulatory Commission and RAND Science Division director; Susan Voss, formerly with the Los Alamos National Laboratory; Richard Cleary of the American Enterprise Institute; and R. Scott Kemp of MIT’s nuclear engineering department, on how civilian nuclear projects can bootstrap nuclear weapons efforts. They make the case that the technology and training acquired just from setting up a civilian nuclear power program can be critical to developing a nuclear weapons program and that even the most proliferation-resistant nuclear reactors—light water reactors—can be used to make bombs. Their analysis also makes it clear that it will not be easy to get states to foreswear making nuclear fuel. Certainly the inability of the United States to do so with Iran, Brazil, South

Korea, and Pakistan is not promising. In addition, this section explores how making nuclear fuel may not be as difficult or expensive as generally believed.

Part III, “How Well Can We Safeguard the Peaceful Atom?” has chapters by Patrick S. Roberts of Virginia Tech; and Olli Heinonen and Pierre Goldschmidt, former deputy directors general for safeguards at the International Atomic Energy Agency (IAEA), assessing the IAEA’s current capabilities and what is most needed to upgrade its nonproliferation efforts. Contrary to the conventional wisdom that all the IAEA needs is additional funding and minor reforms, this section argues that just expanding the IAEA’s current programs may, in fact, reduce the effectiveness of existing inspections. Instead, what is needed is greater clarity on the metrics of success and failure and a focus on much tougher inspections and more enforcement.

Part IV, “Ignoring Nuclear Weapons Proliferation Intelligence,” includes pieces by Leonard Weiss, former chief of staff of the Senate Governmental Affairs Committee; Robert Zarate of the Foreign Policy Initiative; and Gregory Jones of the Nonproliferation Policy Education Center. This set of analyses counters the conventional wisdom that governments are eager to act against proliferators caught violating the rules, and that enough timely intelligence is all that is needed to act. The history of U.S. dealings with Pakistan, Israel, Iran, and North Korea, however, suggests that, even when there are clear signals of proliferation, there is not always a demand to do anything about it.

Part V, “Serious Rules for Nuclear Nonproliferation,” the concluding chapter by Henry Sokolski of the Nonproliferation Policy Education Center and Victor Gilinsky, addresses the question of what non-

proliferation rules would be necessary to enable the global expansion of nuclear energy, while ensuring the number of nuclear weapons states does not grow. The section begins with an examination of America's historical support for both the worldwide use of nuclear power and measures to control the spread of nuclear weapons, dating back to the Atoms for Peace program in the 1950s, as well as how the justification for the support of global power use has shifted over time. The focus then turns to the primary nonproliferation mechanism in place today, the Nuclear Nonproliferation Treaty (NPT), its popular interpretation, and its deficiencies. The popular interpretation of the NPT is known as the "three pillars" view, which holds that the NPT and the nonproliferation regime rest on three objectives that must be balanced against one another. The first objective, or pillar, is nonproliferation (as manifested by Articles I, II, and III of the NPT). This roughly translates into IAEA safeguards and United Nations Security Council enforcement measures against NPT violators. The second pillar is nuclear disarmament (as manifested by Article VI of the NPT). It focuses on reducing the NPT nuclear weapons states' atomic arsenals (almost exclusively the United States and Russia). The third pillar is sharing "peaceful" nuclear technology (as manifested by Article IV of the NPT). This can range, depending on who is defining "peaceful," from the sharing of benign medical isotopes to transferring proliferation-prone nuclear fuel-making technologies.

Unfortunately, the NPT, as it is currently interpreted, has several widely recognized deficiencies. The treaty allows a state to withdraw its membership on 3-months' notice; it does not delineate the limits on permissible "peaceful" technology with respect to fuels immediately useable as nuclear explosives; it sharply restricts IAEA inspections; it lacks a standardized enforcement system, requiring improvised responses to violations; and its universality is undermined by the nuclear activities of India, Israel, North Korea, and Pakistan.

The authors of "Serious Rules for Nuclear Power without Proliferation" suggest that sounder nonproliferation policies are needed, policies that require adequate protection against proliferation as a condition for nuclear trade. They argue that the "three pillars" interpretation of the NPT should be rejected in favor of the view that sees the treaty as primarily about the nonproliferation of nuclear weapons, and recommend five guiding principles to help promote nuclear power without proliferation.

1. Make withdrawals from the NPT effectively impossible. It is not consistent with the NPT's purpose

for members to exercise the withdrawal provision after gaining technology of relevance to weapons, as this was done under the assumption by other members that it was for peaceful uses. NPT members should be prevented from exercising the withdrawal clause while in violation of the treaty (as North Korea did).

2. Limit NPT members' access to, and production of, nuclear weapons-useable materials. The NPT cannot be a vehicle for a state to come overly close legally to a weapons capability. There has to be a technological safety margin between genuinely peaceful and potentially military applications. As a consequence, the "inalienable right" language in the NPT has to be interpreted in terms of the treaty's overriding objective of nonproliferation, and thus there has to be restrictions on the kinds of technology that are acceptable for nonmilitary use.

3. Adjust nuclear sovereignty for greater security. Countries involved with nuclear energy must accept that the inherent international security dangers such involvement implies require them to relinquish a considerable degree of sovereignty to international security organizations, in particular the IAEA inspectorate. In view of the concerns about clandestine facilities, both with respect to enrichment and reprocessing, countries have to agree to essentially unlimited inspection rights for international inspectors if the circumstances warrant.

4. Get serious about enforcement. The NPT needs an established enforcement mechanism to deal with treaty violations in a predictable way. There has to be agreement among the NPT parties concerning reasonably predictable responses to particular violations, and most particularly any effort by a state to withdraw from the NPT, so as to remove the notion that violators can escape with impunity.

5. Apply nuclear limitations and reductions to all nuclear weapons states. All nuclear weapons states have to participate in weapons reductions. In addition to the United States and Russia, this includes not only Britain, France, and China, but India, Israel, Pakistan, and North Korea as well. With 190 nations adhering to the NPT, its obligations should be regarded as universal, thus applying to all countries whether or not they formally joined the treaty. From this point of view, North Korea and the three countries that never joined would be regarded as members who are out of compliance. But by participating in a suitably monitored weapons reduction process, they could be viewed as members in the process of coming into compliance.

The authors recognize that pushing these principles in policy is sure to create considerable friction,

and that it may be impractical to push them at all. But if so, they conclude, it suggests the urgency of curbing the enthusiasm of the United States and that of other nuclear supplier states for the international spread of nuclear energy programs where they currently do not exist. At the very least, until governments have tougher nonproliferation controls in place, they ought not be doing more to promote the export of this technology.

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