



Nonproliferation

Position Statement November 2001

Limiting the spread of nuclear weapons is a major challenge for the United States and the world community in the 21st century. In order to realize the many benefits of nuclear power in the future, it is imperative that this peaceful nuclear technology continue to be applied in such a way that it does not contribute to the spread of nuclear weapons, and that the public has confidence that the diversion of civil nuclear materials into weapons programs will not take place.

It is the position of the American Nuclear Society that;

- (1) Nuclear science and technology can be applied for peaceful purposes in a manner that fully supports and is compatible with achieving desired nonproliferation goals, as embodied in the Treaty on the Nonproliferation of Nuclear Weapons (NPT). Moreover, under appropriate circumstances, different approaches to the commercial nuclear fuel cycle can be implemented in a manner that fully supports global nonproliferation objectives.
- (2) Large stockpiles of weapons-grade plutonium and high-enriched uranium, particularly those in the former Soviet Union, pose a new type of proliferation threat to the world community. Important efforts (including those underway) to secure these materials and to transform them into more proliferation-resistant forms require and warrant substantial attention and resources. Essential programs such as plutonium disposition will require sustained and stable support from the United States and other countries over many years.
- (3) Successfully addressing current and evolving proliferation threats requires that the United States work effectively with both industrialized and developing nations and with established international institutions such as the International Atomic Energy Agency (IAEA). U.S. Governmental policy and actions should continue to reflect the understanding that some other countries, with strong nonproliferation commitments, may choose to pursue peaceful nuclear programs in ways that are different from the prevailing U.S. fuel cycle approach, but that nonetheless, are acceptable from a nonproliferation perspective.
- (4) A strong domestic nuclear infrastructure will greatly enhance the continued ability of the United States to work effectively with other countries in meeting the proliferation challenges of today and tomorrow. However, the erosion that is currently taking place in the domestic nuclear infrastructure is seriously threatening the ability of the United States to continue to influence constructively international nuclear developments and should be reversed.
- (5) The United States should continue to explore and develop the applications of technologies that will further enhance the proliferation resistance of nuclear power systems. These should help ensure that the safeguarded civilian nuclear fuel cycle will continue to remain an unattractive route for acquiring nuclear weapons. United States research and development policy should recognize the widely held view that the long-term sustainability of nuclear power will depend on utilizing more fully the vast potential energy resources in uranium and thorium. Consequently, research and development efforts to further improve



proliferation resistance should include both “closed” as well as “once-through” fuel cycle systems.

- (6) The United States should continue to invest in the development of technologies to monitor and safeguard against the proliferation of nuclear materials. This includes strengthening material accountability and physical protection of nuclear materials in cooperation with the Russian Federation and the IAEA.

The continued support of a strong nuclear nonproliferation regime is a vital national security objective for the United States. In order to be effective, United States nonproliferation policies must be developed and implemented in a manner that ensures broad and bipartisan national support, and carried out with the dedication and constancy that is essential in meeting challenging, long-term objectives.

The American Nuclear Society, founded in 1954, is a not-for-profit scientific and educational society of over 11,000 scientists, engineers, and educators from universities, government and private laboratories, and industry.

Position Statements are the considered opinions and judgments of the Society in matters related to nuclear science and technology. They are intended to provide an objective basis for weighing the facts in reaching decisions on important national issues.