



Assuring U.S. Global Nuclear Leadership

The U.S. government must increase its support for expanding the peaceful use of nuclear energy by promoting the export of U.S. nuclear technology, goods, and services and by maintaining the domestic nuclear market base. U.S. leadership of the global nuclear industry will bring the economic and environmental benefits of nuclear technology to the world and will ensure that high standards for nuclear safety, security, and proliferation controls are maintained.

In order to maintain and enhance U.S. leadership in nuclear nonproliferation and security, ANS recommends that the U.S. government:

1. Implement bilateral agreements that give U.S. nuclear energy suppliers early access to markets where new or expanded nuclear energy infrastructure is under consideration. In negotiating these agreements, the United States should not demand conditions beyond existing U.S. legal requirements that other nuclear supplier nations do not require.
2. Adopt a “whole-of-government” approach to ensure that every U.S. department and agency with a role in U.S. nuclear energy supply is fully engaged in order to make U.S. suppliers competitive by providing financing, training, assured fuel supply, and spent fuel management to foreign nuclear customers for nuclear technology, goods, and services.
3. Enact policies that will ensure that U.S. electric generators will preserve existing reactors as vital national assets, as recommended in ANS Position Statement #26, rather than decommissioning them.

Background

Since the passage of the Atomic Energy Act of 1954, it has been the policy of the United States that

[a]tomic energy make the maximum contribution to the general welfare . . . The development, use, and control of atomic energy shall be directed so as to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise . . .¹

The processing and utilization of source, byproduct, and special nuclear material must be regulated in the national interest and in order to provide for the common defense and security and to protect the health and safety of the public . . .

Additionally, the government should provide for

a program of international cooperation to promote the common defense and security and to make available to cooperating nations the benefits of peaceful applications of atomic energy as widely as expanding technology and considerations of the common defense and security will permit; and a program of international arrangements, and agreements for cooperation . . .²

In the first decades of global nuclear trade, U.S. companies held overwhelming dominance in domestic markets, as well as in foreign markets outside the Soviet Bloc. The U.S. nuclear industry had a strong technology portfolio and a full supply chain developed to serve the large domestic market. That dominance historically provided the U.S. government with significant strategic influence over political, military, and economic policies of U.S. nuclear trading partners.

Foreign host nations seeking the benefits of nuclear technology had no choice but to accept any requirements the U.S. government might impose. In recent decades, however, global nuclear markets have become more competitive. The U.S. government has addressed past industry concerns about inflexible and complex trade policies and procedures that have made it difficult for companies to compete for foreign business, including reforms in the DOE Part 810 program in 2015. But since then, U.S. companies have been losing foreign market share, and the U.S. market is shrinking as more reactors are being decommissioned than are being built. In foreign nuclear markets, U.S. companies face well-financed competitors with proven technology.

A strong domestic nuclear program better positions the U.S. nuclear industry in the global market. In the U.S. market, existing reactors are losing market share to cheap natural gas generation and government-supported wind and solar generation. ANS Position Statement #26, “U.S. Commercial Nuclear Power Plants: A Vital National Asset,” explains the need to preserve the existing fleet for environmental, reliability, economic, national security, and nonproliferation purposes.³ The federal government should take the lead to assure that the U.S. nuclear industry maintains and increases its share of domestic and global nuclear trade. The ANS “Nuclear in the States Toolkit” provides a list of actions the federal government might take to preserve existing plants.

To limit proliferation of enrichment and reprocessing (ENR) technology, the U.S. government should strive to make U.S. companies the suppliers of choice in the competitive global market for reactors and fuel cycle services. Domestic companies following U.S. export controls will not dangerously proliferate ENR technology. U.S. government-assured access to fuel and other services needed to operate nuclear plants will make it unnecessary for customer nations to develop and deploy their own domestic ENR facilities, or to depend on nations unfriendly to the United States for these services.

To win foreign business, U.S. companies must compete with foreign companies owned or heavily supported by their own governments, which have protected home markets to serve as a business base. The home governments of foreign competitor nations aggressively promote their nuclear technology with bilateral nuclear trade agreements that generally do not impose the strict nonproliferation provisions found in U.S. nuclear cooperation agreements (“123 Agreements”). Many potential U.S. partner nations are reluctant to forswear their right to have ENR facilities, even if they have no intention of developing them. If the 123 Agreements prohibit domestic ENR facilities, they may drive foreign customers into the arms of non-U.S. suppliers who do not prohibit them.

If U.S. nuclear policies do not promote U.S. nuclear trade and fail to preserve the domestic reactor fleet, the U.S. nuclear industry will lose global market share to foreign companies and reduce U.S. influence in shaping the energy, nuclear safety, and security policies of emerging nuclear countries.⁴

References

1. Atomic Energy Act, Sec. 1.
2. Atomic Energy Act, Sec. 3.
3. See also Michael Wallace et. al., Back from the Brink A Threatened Nuclear Energy Industry Compromises National Security, The Center for Strategic and International Studies (CSIS): <https://www.csis.org/analysis/back-brink-threatened-nuclear-energy-industry-compromises-national-security>.
4. “What is the Value of the US Nuclear Power Complex to US National Security,” Atlantic Council, October 2019. Accessed on May 27, 2021: <https://www.atlanticcouncil.org/blogs/energysource/what-is-the-value-of-the-us-nuclear-power-complex-to-us-national-security>.



708-352-6611

askanything@ans.org

ans.org