

NONPROLIFERATION AND ARMS CONTROL (NPAC)

Overview of 10 CFR Part 810 Program

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INTERNATIONAL NUCLEAR SAFEGUARDS

Build capacity of the international atomic energy agency and partner countries to implement international safeguards obligations.



NUCLEAR EXPORT CONTROLS

Build domestic and international capacity to implement export control obligations.



NUCLEAR VERIFICATION

Support negotiation of and implement agreements and associated monitoring regimes to verifiably reduce nuclear weapons and nuclear programs.



NONPROLIFERATION POLICY

Develops approaches and strategies to address emerging nonproliferation and arms control challenges and opportunities.







Background on 10 CFR Part 810

- Section 57b. of the Atomic Energy Act of 1954 (AEA) states:
 - "It shall be unlawful for any person to directly or indirectly engage or participate in the development or production of any special nuclear material outside of the United States except
 - As specifically authorized under an agreement for cooperation made pursuant to section 123, including a specific authorization in a subsequent arrangement under section 131 of this Act, or
 - 2) Upon authorization by the Secretary of Energy after a determination that such activity will not be inimical to the interest of the United States [pursuant to 10 CFR Part 810].
- Currently, the Secretary's authority to issue authorizations under Section 57b.2 of the AEA may not be delegated.
- DOE/NNSA is responsible for administering the Part 810 regulation, which implements the Secretary's legal authority in this area.
- The Part 810 regulations enable the control of transfers of nuclear technology and assistance, such as the transfer of reactor design information, consulting services, training, and certain software.







U.S. Nuclear Export Control Regulations



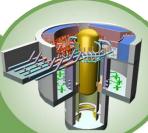
Nuclear Regulatory Commission

Special nuclear material (SNM) and equipment used to produce SNM



Energy

Technology that can indirectly or directly assist in production of SNM







Commerce









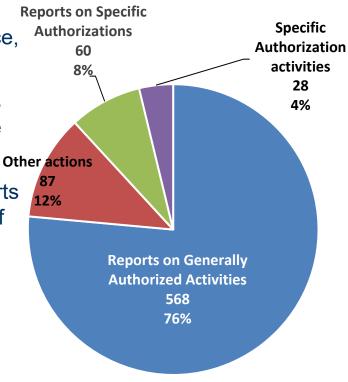




General and Specific Authorizations under Part 810

- The Secretary has "generally authorized" U.S. companies to transfer nuclear technology to many of the world's largest nuclear markets, including the United Kingdom, Japan, the Republic of Korea, France, and the United Arab Emirates.
- The Secretary also has generally authorized activities such as the provision of operational safety assistance and the extraction of medical isotopes.
- U.S. companies can make generally authorized exports without any advance approval from the Department of Energy.
- However, U.S. companies must obtain a specific authorization from the Secretary before:
 - Exporting to China, India, Russia, or any country that does not have a U.S. 123 Agreement, and
 - Exporting enrichment, reprocessing, or other sensitive nuclear technologies to any destination.

Part 810 Reports and Applications in FY 2020









Specific Authorization Process

- Requests for specific authorization require detailed analysis, including:
 - Review of the technology to be transferred by experts at DOE National Laboratories;
 - Review of foreign recipient to identify any past involvement in the diversion of sensitive technology or equipment to entities of proliferation concern; and
 - Ten-factor policy analysis conducted by DOE/NNSA Headquarters.
- Requests are also subject to review by DOE, concurrence by the Department of State, consultations with three other agencies, and approval by the Secretary of Energy.

Review Process for Part 810 Specific Authorizations (Not to Scale)

Intake and Analysis	ODNI Review (If Needed)	DOE Review	Interagency Review	Final Approval	
			Department of State	NNSA Administrator	Secretary of Energy
			Department of Defense		
			Department of Commerce		
			Nuclear Regulatory Com.		

Foreign Gov. Prepares Nonproliferation Assurances







China Policy Framework – Why?

- USG wide policy
- National security measures
 - the result of a U.S. government policy review prompted by concerns about China's efforts to obtain advanced technology outside of established legal processes for U.S-China civil nuclear cooperation.
- Allen Ho and China General Nuclear
- NDAA for FY2016 added ODNI review
- Stated Chinese policies regarding fusion of Civil and Military Nuclear Programs

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China Policy Framework

- Rolled out on October 11, 2018
- Applies to all civil nuclear-related exports to China
- Presumption of approval:
 - Contingent on non-derogatory end-user checks, for new technology transfers for operational safety provided there is a satisfactory technical analysis on applicability to and benefit of operational safety and assessment of the end user
 - Technology transferred prior to 1/1/18 with no negative reporting
- Presumption of Denial:
 - China General Nuclear (CGN) and CGN related entities
 - SMRs
 - Non-light water advanced reactors
 - Any new technology <u>not</u> provided prior to 1/1/18







Factors Considered When Reviewing Requests for Specific Authorization

- 1. Whether the United States has an agreement for cooperation in force covering exports to the country or entity involved;
- 2. Whether the country is a party to, or has otherwise adhered to, the Nuclear Non-Proliferation Treaty (NPT);
- 3. Whether the country is in good standing with its acknowledged nonproliferation commitments;
- Whether the country is in full compliance with its obligations under the NPT;
- 5. Whether the country has accepted IAEA safeguards obligations on all nuclear materials used for peaceful purposes and has them in force;
- 6. Whether other nonproliferation controls or conditions exist on the proposed activity, including that the recipient is duly authorized by the country to receive and use the technology sought to be transferred;
- 7. Significance of the assistance or transferred technology relative to the existing nuclear capabilities of the country;
- 8. Whether the transferred technology is part of an existing cooperative enrichment enterprise or the supply chain of such an enterprise;
- 9. The availability of comparable assistance or technology from other sources; and
- 10. Any other factors that may bear upon the political, economic, competitiveness, or security interests of the United States, including the obligations of the United States under treaties or other international agreements, and the obligations of the country under treaties or other international agreements.







Part 810 Process Improvements

Key Process Improvements:

- ✓ Revised Part 810 regulation
- ✓ Deployed e810 electronic licensing system
- ✓ Standardized internal documents and clarified review processes
- ✓ Initiating requests for nonproliferation assurances earlier in process and reviewing applications in parallel with effort by Department of State to obtain assurances
- ✓ Established deadlines for DOE reviews
- ✓ Eliminated duplicative second round of DOE review

Average Processing Time for Approved Part 810 Specific Authorizations by Year

