



DOC Export Controls and Civil Nuclear Trade

presented by
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Agency Jurisdiction

Process	Agency	Jurisdiction	Advisory Agencies
Part 810	Department of Energy	Nuclear technology and services related to the production of Special Nuclear Material	Departments of Commerce, Defense, State, and the NRC
Part 110	Nuclear Regulatory Commission (NRC)	Nuclear equipment and material	Departments of Commerce, Defense, State, and Energy
Export Administration Regulations	Department of Commerce	Dual-use items listed on the Commerce Control List	Departments of Defense, Energy, and State

U.S. Department of Commerce | International Trade Administration



Commerce Jurisdiction (nuclear power related items)

- Balance of plant – turbines, generators, switching gear, pipes and valves
- Health and safety equipment – radiation detection and monitoring, fire safety, facility security
- General infrastructure, telecommunications, tools and maintenance equipment
- Materials and Manufacturing Equipment



NP Controlled Exports Jan 2014-Sep 2015

- Over 45,000 exports valued at over \$3.2B
- Approximately \$2.9B exported NLR
- Approximately \$239M exported under BIS license
- Top ECCNs: 3A292; 2A291; 1C210; 1C202; 2B230; 3A233; 2B201; 1C234; 1C230; 2A290
- Top Destinations
 - South Korea; Japan; China; Germany; UK; UAE; France; Mexico; Taiwan; Netherlands



Commerce Jurisdiction (NSG dual-use items)



Pressure Transducers (2B230) - Used for pressure measurement in a multitude of industrial processes as well as in the uranium hexafluoride gas in the centrifuge process for isotope separation

Mass Spectrometers (3A233) - Determine composition of chemical samples as well as the chemical make-up of uranium, plutonium, etc



Machine Tools (2B001) - Product manufacturing in virtually every industry including nuclear explosive device components and uranium enrichment equipment



List Based Controls

- ECCN
2B231



- Heading
Vacuum pumps having all of the following characteristics.
 - a. Input throat size equal to or greater than 380 mm
 - b. Pumping speed equal to or greater than 15 m³/s
 - c. Capable of producing an ultimate vacuum better than 13.3 mPa
- Reason for Control
NP1, AT 1



End Use Restrictions Apply

- Section 744.2 (Catch-All /EPCI)
- Restricted end uses
 - Nuclear Explosive Activities
 - Unsafeguarded Nuclear Activities
 - Specific Nuclear Activities
 - Heavy Water Production, Isotope Separation....

§ 744.2 RESTRICTIONS ON CERTAIN NUCLEAR END USES

(a) *General prohibition*
In addition to the license requirements for items specified on the CCLL, you may not export, reexport, or transfer (in-country) to any destination, other than countries in Supplement No. 3 to this part, an item subject to the EAR without a license if, at the time of export, reexport, or transfer (in-country) you know that the item will be used directly or indirectly in any one or more of the following activities described in paragraph (a)(1), (a)(2), and (a)(3) of this section.

(1) *Nuclear explosive activities.* Nuclear explosive activities including research on or development, design, manufacture, construction, testing or maintenance of any nuclear explosive device, or components or subsystems of such a device.¹

(2) *Unsafeguarded nuclear activities.* Activities including research on, or development, design, manufacture, construction, operation, or maintenance of any nuclear reactor, critical facility, facility for the fabrication of nuclear fuel, facility for the conversion of nuclear material from one chemical form to another, or separate storage installation, where there is no obligation to accept International Atomic Energy Agency (IAEA) safeguards at the relevant facility or installation when it contains any source or special fissionable material (regardless of whether or not it contains such material at the time of export), or where any such obligation is not met.

(3) *Safeguarded and unsafeguarded nuclear activities.* Safeguarded and unsafeguarded nuclear fuel cycle activities, including research on or development, design, manufacture, construction, operation or maintenance of any of the following facilities, or components for such facilities:

(i) Facilities for the chemical processing of enriched special nuclear or source material.

(ii) Facilities for the production of heavy water.

(iii) Facilities for the separation of isotopes of source and special nuclear material, or

(iv) Facilities for the fabrication of nuclear reactor fuel containing plutonium.



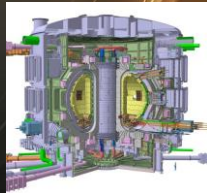
Implementation

- “Knows” provision
- “Is Informed” provision
- “U.S. Persons” provision
- Crossover provision



Not Subject to Section 744.2

- Mining and milling operations
- Fusion reactors (Tokamak and ITER)
- Most trade with IAEA safeguarded facilities
- Naval nuclear propulsion (744.5)



Entity List

A number of entities known to be involved in certain nuclear activities are included on the Entity List, which requires a license where one otherwise would not be required




COUNTRY	ENTITY	LICENSE REQUIREMENT	LICENSE REVIEW POLICY	FEDERAL REGISTER CITATION
PAKISTAN	<p>Pakistan Atomic Energy Commission (PAEC), a.k.a., the following alias:</p> <ul style="list-style-type: none"> -Power Plant Workshops, <p>P.O. Box 1114, Islamabad,</p> <p>and the following three subordinate entities:</p> <ul style="list-style-type: none"> -National Development Complex (NDC), a.k.a., the following two aliases: <ul style="list-style-type: none"> -National Development Centre, and -National Defense Complex, Fatih Jang, Punjab, Rawalpindi, Pakistan, and P.O. Box 2316, Islamabad, Pakistan, -Pakistan Institute for Nuclear Science and Technology (PINSTECH), Nisore, Islamabad, -Nuclear reactors (including power plants), fuel reprocessing, conversion and enrichment facilities, all uranium processing, conversion and enrichment facilities, heavy water production facilities and any collocated auxiliary plants. 	For all items subject to the EAR.	Case-by-case for all items listed on the CCL. Resumption of approval for EAR99 items.	63 FR 64322, 11/19/98 63 FR 14444, 03/17/00, 66 FR 50090, 10/01/01, 77 FR 58006, 9/19/12.



End-Use/End-User Based Controls

Recently, we received an export inquiry for stainless steel pipe for use in a nuclear power plant in China.

Do I need to apply for a license under Part 744.2 of the EAR?



End-Use/End-User Based Controls

I am a distributor of college textbooks.

I often get requests from foreign customers for textbooks on nuclear engineering

Should I be worried about Part 744 controls?



Deemed Export Rule

- The obligation to determine whether a license is required before releasing controlled technology or source code to a foreign national is informally referred to as the “deemed export” rule.
- The release of controlled technology or source code to a foreign national in the U.S. is “deemed” to be an export to the home country or countries of the foreign national.



Nationality

- Commerce Dept. looks to a foreign person’s most recent country of citizenship or permanent resident
- Exempted from the Deemed Export Rule
 - A person granted U.S. citizenship
 - A person granted permanent residence status (i.e. “Green Card” holders)
 - A person granted status as a “protected individual” under 8 U.S.C. 1324b(a)(3).





Deemed Reexport

- What is the “relationship” of this “new foreign national”?
- How was the transaction licensed?
- Were specific country restrictions imposed?
- Could license exception APR or other permissive re exports apply?



QUESTIONS ?

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