DOC Export Controls and Civil Nuclear Trade

presented by
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Director, Nuclear and Missile Technology Division
<table>
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<tr>
<th>Process</th>
<th>Agency</th>
<th>Jurisdiction</th>
<th>Advisory Agencies</th>
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<tr>
<td>Part 810</td>
<td>Department of Energy</td>
<td>Nuclear technology and services related to the production of Special Nuclear Material</td>
<td>Departments of Commerce, Defense, State, and the NRC</td>
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<tr>
<td>Part 110</td>
<td>Nuclear Regulatory Commission (NRC)</td>
<td>Nuclear equipment and material</td>
<td>Departments of Commerce, Defense, State, and Energy</td>
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<td>Export Administration Regulations</td>
<td>Department of Commerce</td>
<td>Dual-use items listed on the Commerce Control List</td>
<td>Departments of Defense, Energy, and State</td>
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</table>
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
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....
Implementation

- “Knows” provision
- “Is Informed” provision
- “U.S. Persons” provision
- Crossover provision
Not Subject to 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 Entities List, which requires a license where one otherwise would not be.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>ENTITY</th>
<th>LICENSE REQUIREMENT</th>
<th>LICENSE REVIEW POLICY</th>
<th>FEDERAL REGISTER CITATION</th>
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</thead>
<tbody>
<tr>
<td>PAKISTAN</td>
<td>Pakistan Atomic Energy Commission (PAEC), a.k.a., the following alias:</td>
<td>For all items subject to the EAR.</td>
<td>Case-by-case for all items listed on the CCL. Presumption of approval for EAR99 items.</td>
<td>63 FR 64322, 11/19/98.</td>
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<td></td>
<td>- Power Plant Workshops,</td>
<td></td>
<td></td>
<td>65 FR 14444, 03/17/00.</td>
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<td></td>
<td>- P.O. Box 1114, Islamabad;</td>
<td></td>
<td></td>
<td>66 FR 50090, 10/01/01.</td>
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<tr>
<td></td>
<td>and the following three subordinate entities:</td>
<td></td>
<td></td>
<td>77 FR 58006, 9/19/12.</td>
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<td>- National Development Complex (NDC), a.k.a., the following two aliases:</td>
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<td></td>
<td>- National Development Centre; and</td>
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<td></td>
<td>- National Defense Complex,</td>
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<td></td>
<td>Fateh Jang, Punjab, Rawalpindi, Pakistan; and P.O. Box 2216, Islamabad, Pakistan;</td>
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<td></td>
<td>- Pakistan Institute for Nuclear Science and Technology (PINSTECH),</td>
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<td>Nilore, Islamabad;</td>
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<td></td>
<td>- Nuclear reactors (including power plants), fuel reprocessing and enrichment facilities, all uranium processing, conversion and enrichment facilities, heavy water production facilities and any collocated ammonia plants.</td>
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</table>
Recently, we received an export inquiry for stainless steel pipe for use in a nuclear power plant in PRC.

Do I need to apply for a license under Part 744.2 of the EAR?
I am a distributor of college textbooks.

I often get requests from foreign customers for textbooks on mining, including material refining.

Should I be worried about Part 744 controls?
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 Re export?

• 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?
Licensing Deadlines

- **The President**
  - Day 90

- **EARB**
  - Day 85

- **ACEP**
  - Day 69

- **OC**
  - Day 53

- **Dept. of Defense**
- **Dept. of State**
- **Dept. of Energy**
  - **Other**
    - Day 39

**Export Application Submitted to Dept. of Commerce**
- Day 9

- Day 1
QUESTIONS?

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