



Agreements for Peaceful Cooperation and U.S. Additional Protocol Implementation

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Agreements for Cooperation

- Section 123 of the Atomic Energy Act requires that significant nuclear exports from the U. S. take place pursuant to an agreement for peaceful nuclear cooperation with the recipient country - 123 Agreement
- Negotiated by the Department of State, with the technical assistance and concurrence of the Department of Energy, and in consultation with the Nuclear Regulatory Commission

Agreements for Cooperation

- Current agreements with the International Atomic Energy Agency (IAEA), 22 countries, and Taiwan
- Most agreements are reciprocal in nature.
- Facilities in the U.S. may be asked to track nuclear materials imported, produced, exported and report inventories
- Facilities may also be asked to track nuclear material which flows through equipment subject to these Agreements

Agreements for Cooperation

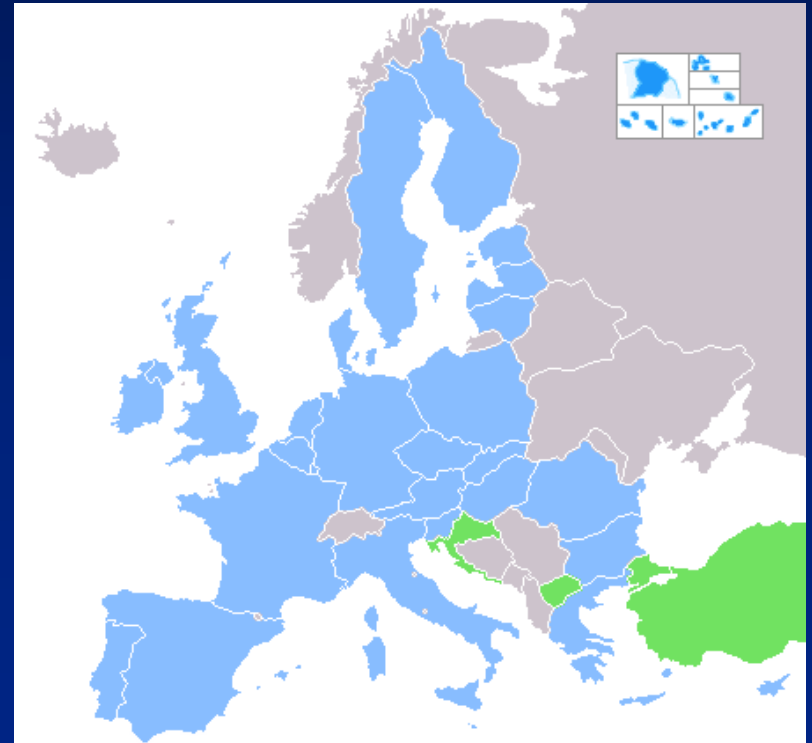
- Four major components of reactors:
 - Pressure vessels heads,
 - fuel charging and discharging machines,
 - complete control rod drive units, and
 - primary coolant pumps.

Agreements in force as of June 2010:

- Argentina
- Australia
- Bangladesh
- Brazil
- Canada
- China
- Colombia
- Egypt
- EURATOM
- IAEA
- India
- Indonesia
- Japan
- Kazakhstan
- Korea, Rep. of
- Morocco
- Norway
- Peru
- South Africa
- Switzerland
- Taiwan
- Thailand
- Turkey
- Ukraine

EURATOM

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Rep.
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- U.K.



Agreements require:

- IAEA safeguards will be maintained
- Peaceful use guarantee
- Adequate physical protection
- No retransfers before prior consent

Administration of Agreements

- DOE negotiates and implements Administrative Arrangements to the Agreements:
 - Establishes provisions for the application of the Agreements (day-to-day activities)
 - Addresses periodic reporting on all imports, exports, and retransfers of nuclear material subject to the Agreement

Foreign Obligations

- Within the U.S.A., materials subject to an Agreement are “obligated”
- May be multiple obligations on material.
- Nuclear material is tracked by the Nuclear Materials Management & Safeguards System (NMMSS)
- All Agreements require parties to produce inventories when requested. Some countries require annual inventories

Pending Agreements

- Russia (Not yet in force)
- Washington Agreement II
- Armenia
- Vietnam
- Mongolia

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U.S Additional Protocol -- Update --

U.S. Additional Protocol

- Expands U.S. declaration requirements and IAEA rights of access to nuclear-related activities
- Requires reporting of and access to all aspects of the nuclear fuel-cycle
- Expands access to nuclear fuel cycle facilities, activities, and related locations
 - **Complementary Access**
- Initial report required upon entry into force, with additional annual updates due by May 15th each year

U.S. Additional Protocol

- Ratification and Entry into Force – January 6, 2009
- Submission of U.S. Initial AP Declaration – July 3, 2009
- Submission of 1st U.S. Annual Update – May 15, 2010

Complementary Access

- Reasons for access:
 - Verify the absence of undeclared nuclear materials and activities,
 - Question about the correctness and completeness of declarations
- Types of access:
 - 24 hour vs. 2 hour notice
- IAEA will likely begin conducting complementary access within the U.S. this year (2010)

Role of the NRC

- NRC will work with the facility to ensure:
 - Protection of sensitive or classified information
 - The facility is not excessively burdened
 - Participants health and safety
- NRC will work with the IAEA to ensure:
 - Goals of the CA are accomplished
 - IAEA is not impeded during the access
 - All questions/concerns are addressed

Facility Requirements and Support

- Examples:
 - Provide access to the IAEA
 - 10 CFR Part 75.8 (d)
 - Escort IAEA personnel during CA
 - 10 CFR Part 75.8 (d)
 - Personnel health and safety during CA
 - 10 CFR Part 75.8 (h)
 - Allow IAEA verification activities during CA
 - 10 CFR Part 75.8 (g)

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