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Annual Users Training Meeting

May 9-12, 2016 | New Orleans, LA

U.S. Nuclear Cooperation Agreements and Their Relationship with the U.S. Nuclear Industry

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Presentation Outline

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- What is a Section 123 Agreement?
- U.S. Government Responsibilities in Negotiating 123 Agreements
- How Does the U.S. Government Decide When to Negotiate a 123 Agreement?
- Section 123 Nonproliferation Requirements
- 123 Agreements Currently in Force
- Highlights of Selected 123 Agreements
- 123 Agreements Under Negotiation
- The Role of NMMSS Reporting
- Why Do Different 123 Agreements Have Different Reporting Requirements?
- Conclusions





What is a 123 Agreement?

- Section 123 of the Atomic Energy Act of 1954 is the controlling statute for peaceful nuclear cooperation with other states
- Section 123 requires the United States to enter into an international agreement with a foreign partner establishing nonproliferation conditions for any U.S. exports
- 123 agreements establish a legal framework that permits the export of:
 - Nuclear material (reactor fuel)
 - Nuclear reactors
 - Significant reactor components



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U.S. Government Responsibilities in Negotiating 123 Agreements

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- 123s negotiated by Department of State, with technical assistance from Department of Energy and concurrence of the Nuclear Regulatory Commission
- Department of Energy negotiates and implements administrative arrangements to the agreements
- The Nuclear Regulatory Commission reviews and approves license requests for all exported nuclear material and equipment subject to the Agreement



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How Does the U.S. Government Decide When to Negotiate a 123 Agreement?

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- A variety of factors are considered:
 - Nonproliferation benefits
 - Interest from U.S. nuclear industry
 - Political/strategic considerations
 - Expressions of interest from potential foreign partners
- National Security Council leads an interagency dialogue that regularly weighs possibilities for future 123 agreement negotiations





Section 123 Nonproliferation Requirements

- Safeguards guarantees for all non-nuclear weapons states on all transferred nuclear material and equipment
- Full scope safeguards (non nuclear weapons states only)
- Peaceful uses assurances
- Right of return in the event the other party detonates an explosive device or violates/terminates an IAEA agreement for safeguards
- No alteration in form or content, including reprocessing and enrichment, without permission
- No retransfer without U.S. permission
- Physical security guarantees
- U.S. prior approval of storage facilities
- Sensitive nuclear technology obligations





123 Agreements Currently in Force

- The United States has 22 agreements in force with:
 - Argentina
 - Australia
 - Brazil
 - Canada
 - China
 - Egypt
 - EURATOM (28 countries)
 - India
 - Indonesia
 - Japan
 - Kazakhstan
 - Republic of Korea
 - Morocco
 - Russian Federation
 - South Africa
 - Switzerland
 - Turkey
 - Ukraine
 - United Arab Emirates
 - Vietnam
 - International Atomic Energy Agency
 - Taiwan (through non-gov't channels)



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Highlights of Selected 123 Agreements

■ China

- New 123 Agreement entered into force in October 2015
- Administrative Arrangement and joint training plan negotiations are ongoing
- Agreement contains enhanced nonproliferation and technology transfer provisions compared to previous agreement
- Grants China advance consent to reprocess under jointly agreed upon arrangements and procedures
- New agreement reflects the growing U.S.-China nuclear relationship
 - Four Westinghouse AP1000 reactors with potential for additional sales





Highlights of Selected 123 Agreements

■ Republic of Korea

- New Agreement entered into force in November 2015
- Reflects ROK's status as a major global supplier and the importance both governments place on high standards of safety, security, and nonproliferation
- Agreement does not provide advance consent to enrich or reprocess but does leave open the possibility of future decision to do so
- U.S.-ROK High Level Bilateral Commission
 - Senior level forum to facilitate peaceful nuclear cooperation in areas of mutual interest
 - created to discuss spent fuel management, assured fuel supply, export cooperation, and nuclear security issues
 - conducted its first meeting in April 2016





Highlights of Selected 123 Agreements

■ India

- 2008 U.S.-India 123 Agreement and Nuclear Suppliers Group (NSG) exemption opened the path for nuclear cooperation with India
 - U.S. currently assisting Indian efforts to become NSG member
- U.S.-India Administrative Arrangement completed but does contain unusual provisions
 - Indian obligated material unlikely to come to U.S. in near future
- India has now complied with Convention for Supplementary Compensation for Nuclear Damage
 - Indian Government has also created an insurance pool; intended to ease supplier concerns about liability risks



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Role of NMMSS Reporting in U.S. Cooperation

- The U.S. government relies on U.S. suppliers to report foreign obligated nuclear material in order to maintain its international legal commitments
- Most U.S. 123 agreements contain requirements for the United States to report on the current inventories of material transferred subject to the agreement
 - Administrative Arrangements
- The U.S. government relies on accurate and comprehensive NMMSS reporting to meet these requirements





Why Do Different 123 Agreements Have Different Reporting Requirements?

- U.S. Government uses Section 123 nonproliferation requirements as the basis for its 123 agreement texts
- Once negotiations begin, different partners want to emphasize different aspects of the potential cooperation in the agreement
 - Political, bureaucratic, legal, economic, technical, research and development are all possible considerations
- Significance and convenience of maintaining uniform reporting requirements versus displaying flexibility in order to reach an agreed text

- Though the global “nuclear renaissance” has not fully materialized, the number of U.S. nuclear cooperation partners is likely to increase in the next 5-10 years
 - Large amounts of foreign obligated material unlikely to come to the United States soon
- Future actions of China, India, and Russia will have a significant impact on the global nuclear market
- Accurate NMMSS reporting allows the U.S. Government to comply with its international legal commitments and open commercial opportunities for U.S. industry

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Questions/comments?

Thank you for your attention.

