



# Agreements for Peaceful Nuclear Cooperation and Reciprocal Obligations

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### **Presentation Outline**

- I. Introduction
- II. Agreements for Peaceful Nuclear Cooperation
- III. Reciprocal Obligations
- IV. Conclusion



#### I. Introduction

- Agreements for peaceful nuclear cooperation between and among governments allow for the lawful export of nuclear material and equipment
  - When concluded by the United States, these agreements are commonly referred to as "123 agreements"
- These agreements create obligations on states to fulfill conditions contained in the agreement and provide information about how material and items transferred subject to the agreement are being used



- Legal authority to conclude an agreement for peaceful nuclear cooperation comes from Section 123 of the Atomic Energy Act of 1954, as amended
- 123 agreements establish a legal framework under which U.S. suppliers may export:
  - Nuclear material (reactor fuel)
  - Nuclear reactors
  - Significant reactor components (pressure vessels, calandrias, complete control rod reactor systems, primary coolant pumps, on-line refueling mechanisms)



- Benefits of a 123 agreement
  - Nonproliferation
    - U.S. consent rights attach to U.S.-obligated material and equipment for enrichment, reprocessing, storage, retransfer
    - Full scope IAEA safeguards and physical security requirements
  - Commercial
    - Agreement provides the legal foundation for U.S. suppliers to export material and equipment
    - Network of 123 agreements allows U.S. companies to partner with foreign firms for additional market opportunities (e.g. Westinghouse content in KEPCO UAE bid)



#### The United States has 24 123 agreements in force with:

- Argentina
- Australia
- Brazil
- Canada
- China
- Colombia
- Egypt
- EURATOM (27 countries)
- India
- Indonesia
- Japan
- Kazakhstan

- Republic of Korea
- Morocco
- Norway
- Russian Federation
- South Africa
- Switzerland
- Thailand
- Turkey
- Ukraine
- United Arab Emirates
- International Atomic Energy Agency
- Taiwan (through non-gov't channels)



- Current 123 agreement negotiations
  - Republic of Korea (current agreement expires March 2014)
  - Taiwan (current agreement expires June 2014)
  - Saudi Arabia
  - Jordan
  - Vietnam
- Upcoming 123 agreement negotiations
  - China (current agreement expires December 2015)
  - International Atomic Energy Agency (current agreement expires August 2014)



- Evolution of Obligations in 123 Agreements
  - In early years of U.S. global nuclear cooperation, 123
    agreements were predominantly unilateral, supply
    agreements with one way obligations
  - In late 1970s, 123 agreement nonproliferation conditions became more strict while additional suppliers entered the market
    - In response, modern 123 agreements carry reciprocal obligations
    - The U.S. is now commonly bound to conditions and limitations imposed by the partner state
    - Obligations only attach when items are transferred subject to the Agreement



#### Reporting Requirements

- Cooperation patterns with major trading partners are well established (Australia, Canada, Euratom, Japan)
- The United States maintains administrative arrangements with these states specifying detailed procedures to account for obligated material
- Led by the Department of Energy (DOE), the United States has negotiated and intends to negotiate administrative arrangements with our increasing number of nuclear partners



- Reporting Requirements (continued)
  - The United States strives for standard language in its 123 agreements and administrative arrangements, but different partners may have different sensitivities and priorities
  - Variance in reporting requirements may result
  - As the number of civil nuclear programs grow, this trend may continue



- What current/future partners are likely to export large quantities of their obligated material to United States?
  - China?
  - Republic of Korea?
  - Southeast Asian partners?
  - Kazakhstan?
  - Russia?
  - India?



### IV. Conclusions

- 123 agreements provide the legal foundation for the export of U.S. material, reactors, and significant reactor components
- The number of 123 agreements and U.S. nuclear trading partners is likely to rise in the next few decades
- Due to reciprocal obligations, inventory reporting requirements are likely to increase in quantity, variety, and become more sensitive to policy makers, and consequently also to industry



### Contact Information/Questions

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## Questions/comments?