# U.S. Agreements for Peaceful Nuclear Cooperation (123 Agreements)



#### James R. Warden, Director Office of Nuclear Energy, Safety, and Security Bureau of International Security and Nonproliferation



## **Outline of Presentation**

- I. Atomic Energy Act Section 123 Requirements
- II. Current 123 Agreements
- III. Ongoing Negotiations
- IV. Enrichment and reprocessing (ENR)Commitments
- V. Prioritizing Policy Considerations
- VI. Effects of New Technologies



## Section 123 Requirements

Section 123(a) of the Atomic Energy Act lays out nine nonproliferation conditions in order to export material, equipment, or major nuclear components:

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



#### **Current 123 Agreements**

24 Agreements with 48 countries, the IAEA, and the authorities on Taiwan

- 1. Argentina
- 2. Australia
- 3. Brazil
- 4. Canada
- 5. China
- 6. Egypt
- 7. EURATOM
- 8. India
- 9. Indonesia
- 10. Japan
- 11. Kazakhstan
- 12. Morocco

- 13. Norway
- 14. Republic of Korea
- 15. Russia
- 16. South Africa
- 17. Switzerland
- 18. Turkey
- 19. Ukraine
- 20. United Arab Emirates
- 21. United Kingdom
- 22. Vietnam
- 23. IAEA
- 24. Taiwan (through nongovernmental channels)



## **Ongoing Negotiations**

- Under negotiation:
  - Thailand (2019)
  - South Africa (2020)
  - Saudi Arabia (2012)
  - Jordan (2008)
- Completed, pending entry into force:

- Mexico (since 2018)



### Enrichment and Reprocessing Commitments

- <u>Atomic Energy Act</u>: No ENR of U.S.-obligated nuclear material without U.S. consent
- <u>Political commitment</u>: Intent to rely on existing international markets in lieu of acquiring sensitive nuclear technologies (SNT)

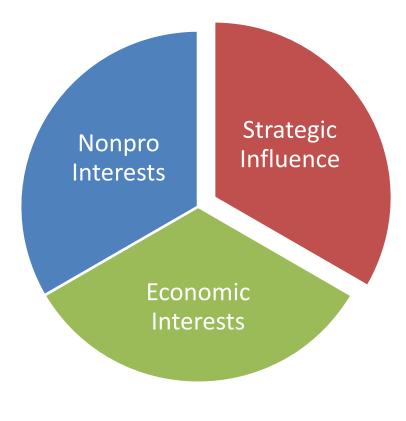
– Vietnam, Mexico\*

• <u>Legally binding prohibition</u>: Will not engage in ENR activities or possess SNT

– UAE, Taiwan



#### **Prioritizing Policy Considerations**



- High safety, security, & nonproliferation standards
- Strong strategic relationships
- Strong domestic nuclear industry
- Ebbing of U.S. influence endangers all
   these.



## **Effects of New Technologies**

- AEA requirements are technology agnostic and unlikely to be affected by new reactor technologies.
  - IAEA safeguards
  - Peaceful uses
  - Right of return
  - Physical security
  - No ENR of U.S. obligated material
    without consent

- No retransfer of U.S. obligated items
  without consent
- U.S. approval of some storage
- SNT obligations

#### **Questions?**