

Nonproliferation, Enrichment and Nuclear Power: Challenges in the Asia Pacific

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Spread of Nuclear Power Locally

- ★ Nuclear power in the Asia-Pacific:
 - ★ 123 operable nuclear power reactors
 - ★ 41 under construction
 - ★ Firm plans for an additional 92
- ★ Greatest growth is in India, China and South Korea
- ★ But also Malaysia, Thailand, Vietnam, Bangladesh, Indonesia and Philippines



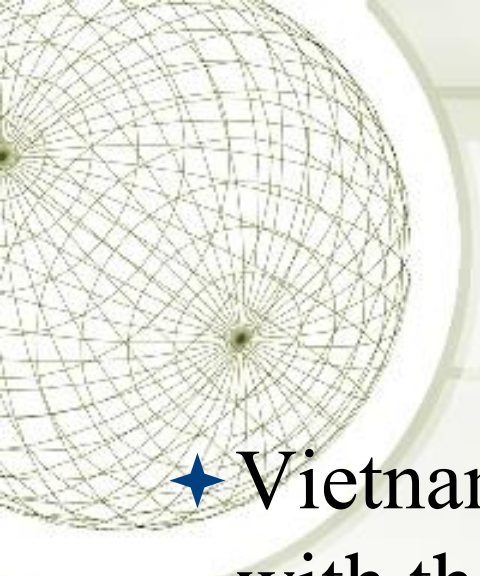
How Does Nuclear Power Complicate Nonproliferation?

- ★ Typical civilian nuclear power program does not (LWR, spent fuel shipped out)
- ★ Atypical civilian nuclear program can complicate nonproliferation:
 - ◆ Heavy water reactors
 - ◆ Enrichment
 - ◆ Reprocessing



Enrichment and Nuclear Nonproliferation

- ★ Why is enrichment a serious problem for nuclear nonproliferation?
 - ★ The same equipment that is used to enrich U to 2.5% for nuclear power can be used to enrich to 90% for nuclear weapons
 - ★ Safeguards can be circumvented or discarded
 - ★ Political leaders can become emboldened by it
 - ★ Neighbors can become nervous or covetous because of it
 - ★ Global nonproliferation repercussions



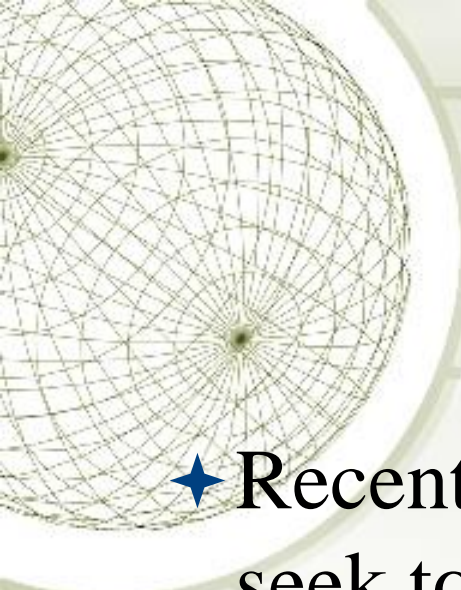
Case Study: Vietnam

- ★ Vietnam's negotiations for 123 Agreement with the USA
- ★ Neighbors informally expressed angst and agitation
- ★ No understanding of regional or global repercussions
 - ◆ E.g., UAE's "gold standard"



Case Study: Japan

- ★ Multiple interviews over a decade: conservative politicians see Japan's enrichment capability as a nuclear weapons capability
- ★ Iran repeatedly refers to Japan's enrichment capability: why them and not us?
- ★ Serious issue: South Korea



Case Study: Australia

- ★ Recent discussions that South Australia may seek to expand its fuel cycle capabilities, including enrichment
- ★ In my research, I have seen no indication that policymakers are aware that enrichment is a global “third rail”
- ★ Private conversations with South Koreans:
If Australia, then us



Lessons Learned

- ★ National enrichment – or even discussions of – influences perceptions and/or behavior domestically, regionally and possibly globally
- ★ “But you can trust us” does not work in the politically charged environment of nuclear politics
- ★ The spread of enrichment threatens nuclear nonproliferation (and disarmament)