Link between Nuclear Disarmament and Nonproliferation in the context of Nuclear Energy Expansion

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“... the ultimate ambition of a world free from nuclear weapons ... Under this bargain there is a right for all states to develop civil nuclear power. But there is a responsibility for these states to reject the development of nuclear weapons. And there is a responsibility too on nuclear weapons states to reduce their nuclear weapons. ... must aim to build confidence, confidence that action to prevent proliferation is working and that States with weapons are making strides to live up to their commitment ...”
“... America's commitment to seek the peace and security of a world without nuclear weapons … Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy ... We need real and immediate consequences for countries caught breaking the rules or trying to leave the treaty [NPT] without cause.”
What does disarmament to “zero” mean in a world where states can plausibly hide latent capabilities to produce a few nuclear weapons within weeks or months with no warning?

Will States be more willing to disarm if there was a “reasonable chance of clandestine stockpiles of warheads and fissile material being detected.”
Need to achieve two objectives

1. Verifying transition to zero
   • Weapons dismantlement, destroyed and not reconstituted with clandestine production infrastructure, existing stocks and expertise (e.g. elimination)

2. On-going verification and prevention of rearmament or new nuclear weapons programs
   • Fissile material safeguarded and converted
   • Facilities & expertise destroyed or redirected
   • Control of dual and multi-use of nuclear weapons-specific materials, components, facilities and capabilities
   • No hedge
Nonproliferation Policy and R&D can reduce risks

- Monitoring for clandestine nuclear weapons programs
  - make it as hard as possible to build weapons capability (material and technology) clandestinely
  - make it as hard as possible to continue once existence is disclosed
- Research for proliferation resistant nuclear fuel cycle technologies and Pu disposition
- Pursue governance and regulations to support nonproliferation
Backup
Acquiring nuclear weapons is a question of capability, intent, and constraints

For some highly capable states, the timeline for acquiring a nuclear weapon capability is chiefly a question of the timeline for a change in intent.

For some highly motivated states, the timeline for acquiring a nuclear weapon is time it takes to overcome remaining technical hurdles or find a shortcut around them.

Terrorist interest in acquiring nuclear weapons has increased. For plausible terrorist nuclear pathways—e.g., direct purchase or theft of nuclear material—the timelines could be very short despite limited starting capability.