JULIANBORGER'S GLOBALSECURITYBLOG

A compromise proposal for nuclear talks with Iran

A US-based team of nuclear experts suggest a way of breaking the deadlock over Iran's uranium enrichment capacity

Phased out? Iranian IR-1 centrifuges Photograph: Reuters

As American and Iranian officials meet in Geneva to try to find a way through the impasse holding up a comprehensive multilateral deal on Iran's nuclear programme, a group of Princeton University academics have sent them a proposed road-map on how to get around the blockage.

The Princeton report, published on the Arms Control Today website, focuses on the core issue that has proved most problematic in the four months of talks so far - Iran's future capacity for enriching uranium. This has hitherto been such a gap to bridge

because Iran and the West come at it from entirely different perspectives.

The West is concentrating on limiting Iran's breakout time - how long it would take Iran to enrich enough weapons-grade uranium to make a bomb. It would like to see a breakout capacity of a year or so, with the idea that would give plenty of warning if Tehran decided to junk its legal non-proliferation obligations and make a dash for a warhead. On those calculations, the upper ceiling for capacity would be a few thousand uranium-enriching centrifuges. That would represent a sharp reduction from its current total of 19,000 installed machines, ten thousand of which are operating.

Iran views its capacity needs in terms of long-term energy and research needs. It says it wants to free itself from total reliance on oil and gas, for environmental and long-term planning reasons, and expand its ability to produce isotopes for medical, industrial and agricultural uses. So it needs a capacity measured in tens of thousands of centrifuges to supply the many power stations it says it wants to build, and it does not want to be dependent on foreign supply, as is presently case for its Russian-built, Russian-fuelled nuclear power station in Bushehr.

The Princeton compromise is a two-stage approach, allowing a very limited enrichment capacity for the existing research reactor in Tehran in the short term, but with the flexibility to expand that capacity to keep pace with the construction of future nuclear power stations in the long term. The existing contract for Russian nuclear fuel rods for Bushehr expires in 2021. If Tehran decides it wants to use it own rods after that, then its enrichment capacity would be stepped up as that deadline approaches, but not before 2019.

In the intervening five years, Iran would focus on modernising its enrichment plant, replacing the now ancient and inefficient IR-1 centrifuges, based on half-century old technology, with a new generation of IR-2m centrifuges, with about five times the capacity. As the new machines were installed in this first phase, total capacity would remain the same. Even more advanced centrifuges would be developed with an eye to the future.

To reassure the international community Iran was not diverting new centrifuges to some covert site intended for weapon-grade enrichment, it would stockpile them in their component pieces under the supervision of the International Atomic Energy Agency. It would take at least six months to put them together and get them working properly, the authors reckon. Iran would meanwhile abide by the transparency arrangements it agreed in the Joint Plan of Action with six world powers in November, giving the IAEA access to its centrifuge-making workshops and storage facilities.

Finally, Iran and the six powers would use the five year first phase to negotiate a multinational consortium which would enrich nuclear fuel for the entire region under strict international safeguards.

The obvious problem with this plan is that in the second phase, Iran would have an enrichment capacity least ten times greater than its current level, capable of churning out tens of bombs-worth of weapons-grade uranium per year if diverted to that purpose. The Princeton authors' solution is to establish a permanent transparency regime for centrifuge production, so the IAEA will always know where every centrifuge is, and to work on setting up a regional enrichment consortium.

In effect, then, the problem is kicked down the road in the hope that a much-enhanced atmosphere would be more conducive to ambitious multilateral arrangements that currently seem beyond reach. A large dose of wishful thinking has been factored in.

There is also a school of thought that any approach based primarily on breakout times is misjudged. Jeffrey Lewis. at the Monterey Institute of International Studies, argues that if Tehran was going to cheat the system and build a bomb secretly, it would not do it with its officially declared enrichment capacity, which is under IAEA safeguards. To do so would instantly trigger a pre-emptive strike from the US or Israel. Instead, it would seek to build up a covert capacity away from the world's gaze.

In an article in Foreign Policy, Lewis argues:

> Having a significant quantity of highly enriched uranium sitting around isn't a deterrent -- it is an invitation to preemption...Let me put this simply: Even if the Iranians build a bomb, they are likely to pretend for a prolonged time that they haven't. Imposing limits on the number, capability, or operation of Iran's centrifuges is a fool's errand. It is far more important to win concessions on verification and access to Iran's nuclear program.

The trouble with this approach is that, in circumstances where Iran has a large enrichment capacity and a short breakout time, any glitch in a monitoring and verification programme could be enormously significant. But glitches can also happen for more innocent reasons, falling out over details and protocols and a whole array of misunderstandings. The world would be an uncertain hair trigger. Little wonder the talks have been so slow going, and little wonder there is already a lot of chatter about going into extra time.

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