



briefing

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Canada, India, and changing the nonproliferation rules

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By virtue of India's unauthorized use of Canadian-origin technology, Canada has figured prominently, if unwillingly, in five decades of Indian nuclear weapons development. Now, a proposal to exempt India from prevailing nuclear cooperation restrictions could mean either a reinforcement of that pattern or a chance for Canada to channel its historical involvement into support for new arrangements that would not compromise nonproliferation objectives.

During the 1950s, Canada supplied India with its first heavy water nuclear reactor, the CIRUS,¹ to be used exclusively for "peaceful purposes."² The CIRUS, over the protestations of Canada, nevertheless became the source of the weapons-grade plutonium used to build India's first nuclear warhead, which was detonated in 1974. Since then the CIRUS and the larger Indian-built Dhruva reactor, based on the CIRUS design, have supplied most of the weapons-grade plutonium for India's current arsenal of about 50 warheads and plutonium for another 50.

The US-India nuclear cooperation deal

Through the Nuclear Suppliers Group (NSG), established largely in response to India's diversion of civilian technology and materials to military purposes, supplier states agree to refuse all nuclear cooperation (e.g., trade) with any state that is not under full-scope safeguards—whether it is a non-nuclear weapon state (NNWS) party to the Nuclear Non-Proliferation Treaty (NPT) or a state outside the NPT. Full-scope safeguards mean that a state has no nuclear programs

or facilities that are not subject to International Atomic Energy Agency (IAEA) inspections (and any facilities not under inspections are presumed to be for military purposes). But soon the NSG will be asked to act on a US-India proposal to exempt India from the full-scope safeguards rule in order to accommodate the US-India nuclear cooperation deal reached in 2005 (Regehr 2005).

The proposed exemption is controversial, partly because Pakistan and Israel, also states outside the NPT with nuclear weapons programs, and thus not under full-scope safeguards, will demand the same deal, and partly because the exemption could embolden states within the NPT and suspected of harbouring nuclear weapons ambitions, notably Iran, to defy the obvious double standard inherent in accommodating India's nuclear arsenal while demanding that Iran suspend uranium enrichment even for peaceful purposes. But even more controversial is the likelihood, indeed the certainty, that the Indian exemption as currently proposed would, in the name of civilian cooperation, facilitate the accelerated expansion of India's nuclear arsenal.

Even so, a blanket refusal to adapt in any way to the Indian reality, or the reality of other de facto nuclear weapon states (NWS)—i.e., states with nuclear weapons that are outside the NPT—could also have dangerous consequences.

De facto nuclear weapon states

The nuclear status quo with regard to India, Israel, and Pakistan is not compelling. Each year, for example, the international community calls on India, Israel, and Pakistan to join the Nuclear Non-Proliferation Treaty as non-nuclear weapon states.³ Although that remains the most desirable objective from the perspective of nonproliferation, there is little evidence that such an outcome is likely. Neither the refusal to acknowledge the unique situation of the three states, nor the refusal to permit civilian nuclear cooperation with them has prevented them from acquiring nuclear weapons. And keeping them out of the formal nuclear nonproliferation regime means they are subject to few legal or even political constraints.

The challenge is to create a place for these three de facto NWS (North Korea is not a parallel case) inside the nuclear nonproliferation system and, in return, to require them to accept the same obligation to disarm that applies to those states bound by Article VI of the NPT, and to accept certain obligations and commitments consistent with the overall objectives of nonproliferation (which all three claim to support).

Without any adjustment to the rules, individual supplier states could increasingly make unilateral changes (NSG guidelines are voluntary and rely on consensus and mutual consent) and begin largely unconditional cooperation with states outside the NPT, with potentially fatal consequences for the nuclear nonproliferation regime. To head off that unwelcome prospect the international community needs to find a way to deal with the reality of the nuclear challenges of India, Israel, and Pakistan without inflicting permanent damage on collective nonproliferation objectives.

Canada's role

Canada has the opportunity to be a key player in resolving this dilemma because of its membership in the NSG, in which decision-making is by consensus—essentially giving each member a veto. Canada is also recognized as having a special stake in ending the use of Canadian-origin technology for building nuclear weapons, which means that Canadian leadership will be expected and is likely to be respected by many of the other suppliers.

Two important places to exercise that leadership involve the entry into force of the Comprehensive Test Ban Treaty (CTBT) and a freeze on the production of fissile material for weapons purposes, pending the negotiation of a treaty to make the ban permanent (generally referred to as the fissile material cut-off treaty or FMCT).

The CTBT has been agreed to but won't come into force until it is ratified by all the nuclear weapons states and all states with nuclear reactors—a list that obviously includes India, Israel, and Pakistan (of the three, only Israel has signed and none has ratified it). The US-India deal stipulates that US bilateral cooperation will end if India tests another nuclear device. At a minimum, this commitment should be extended and multilateralized to make CTBT ratification a precondition for civilian nuclear cooperation and to ensure that any exemption from the NSG full-scope safeguards guideline will end in the event of a weapons test.

Recent reports indicate that this issue has become a point of serious contention in ongoing US-India bilateral negotiations on the details of the agreement. The *Financial Times* (Luce & Johnson 2007) reports that Indian scientists argue that the “right to test” must be retained, a particular concern being “that nuclear cooperation could be suspended if India tested in response to nuclear tests by neighbours such as China and Pakistan.” But, of course, if India is worried about Chinese and Pakistani testing it should be all the more willing to sign and ratify the CTBT, and challenge its neighbours to do the same, in order to move decisively toward prohibiting all such testing (China has signed the CTBT, but not ratified, and has joined the testing moratorium of the other NWS).

Halting production of fissile material for weapons

Another fundamental nonproliferation objective is to halt the production of fissile material for weapons purposes. According to a 2006 report of the International Panel on Fissile Materials (Mian et al 2006), based at Princeton University, current NSG guidelines against nuclear cooperation with states not under full-scope safeguards serve at least to constrain India's civilian and military programs because of their reliance on limited domestic uranium supplies. So if India were to gain access to the foreign sources of uranium that the proposed exemption would open up

for its civilian programs, it could then funnel all its domestic supplies into an expanded production of fissile materials for weapons purposes in the facilities it is keeping out of safeguards under the proposed US-India deal.

The unsafeguarded CIRUS reactor, set to run until 2010, could then generate enough plutonium for another 10 warheads. Similarly, the CIRUS progeny, the Dhruva reactor, could deliver weapons-grade plutonium sufficient to build another five or six warheads per year. The new breeder reactor that India plans to bring on stream in 2010 could produce weapons-grade plutonium from the spent fuel of India's other unsafeguarded CANDU-style reactors.

All told, under the exemption, India could accumulate enough plutonium for an arsenal of more than 300 nuclear warheads within a decade—an arsenal to rival or exceed those of the UK, France, and China.

India already has enough fissile material to meet any requirements of its declared “minimum deterrence” doctrine. And even though India has declared its support for negotiations toward an FMCT, it appears determined to increase and accelerate fissile material production for weapons purposes while the Treaty negotiations drag on (assuming they ever get started)—and it needs the NSG exemption for that very purpose.

Canada has already signaled its opposition to that scenario. In December 2005 Canada told US officials that while it welcomed efforts to deal constructively with states like India outside the NPT, “the deal would have been more positive if the United States had obtained an Indian commitment to freeze production of fissile material for nuclear weapons” (Squassoni 2006). It is a mild statement that nevertheless embodies a principle that the NSG should make its own—that is, civilian nuclear cooperation with India or any de facto nuclear weapon state outside the NPT should also be conditional on their imposing a verifiable freeze on the production of fissile material for weapons purposes until their adherence to an FMCT that converts the freeze into a permanent ban.

The role of the Security Council

Then there is still the matter of UN Security Council Resolution 1172, which imposes a particular set of obligations and demands on both India and Pakistan,

calling on them “immediately to stop their nuclear weapon development programmes, to refrain from weaponization or from the deployment of nuclear weapons,” as well as to cease the development of nuclear-capable ballistic missiles and to refrain from exporting related equipment or materials. For NSG states to exempt India from its rules, while India continued to weaponize its nuclear capabilities, would at best put NSG states in violation of the spirit of the resolution.

Consequently, before NSG states authorize any rule change that would in effect accept India's nuclear arsenal and thus support India's ongoing violation of UNSC Resolution 1172, it should be incumbent on the Security Council to specifically modify India's obligations under 1172. Such a move would then, of course, require a decision on Pakistan as well. Would Pakistan be granted the same reprieve, or would the Security Council decide to bless an India-only exemption from the requirements of the resolution and thus introduce another level of discrimination into the nonproliferation regime? It is a dilemma that illustrates the central flaw in the US-India deal's attempt to fashion an India-only exemption to nonproliferation rule.

India, along with Israel and Pakistan, have become entrenched as de facto nuclear weapon states. The attempt to isolate India from the nonproliferation regime has not prevented this entrenchment, but acquiescing to the proposal to simply exempt it from the most basic nonproliferation rules would inevitably lead to other exemptions and thus to a progressively weakened nonproliferation system. Dealing forthrightly with the three de facto nuclear weapon states that are not party to the NPT should, at a minimum, ensure that changed rules do not tolerate nuclear testing and do not become a license for further or accelerated production of fissile materials for weapon purposes.

Instead, changes in civilian nuclear cooperation rules with states outside the NPT should require adherence to the provisions of the CTBT, a freeze on production of fissile material production for weapons purposes (the five NWS within the NPT are currently observing such a freeze), acceptance of NPT Article VI disarmament obligations, and acceptance of the obligations taken on by NWS within the NPT through the 1995 and 2000 NPT review conferences.⁴

Notes

1. "CIRUS" stands for Canada India Research U.S.; the US refers to US provision of heavy water.
2. Article III of the April 28, 1956 agreement between Canada and India states: "The Government of India will ensure that the reactor and any products resulting from its use will be employed for peaceful purposes only." India subsequently defended its 1974 nuclear warhead test, which relied on CIRUS plutonium, as a peaceful nuclear explosion. The Canada-India agreement, termed the Colombo Plan Reactor Project, is available at <http://www.nci.org/06nci/04/Canada-India%20CIRUS%20agreement.htm>.
3. For example, UN General Assembly Resolution A/RES/61/74 of January 3, 2007 "Reaffirms the importance of the universality of the Treaty, and calls upon States not parties to the Treaty to accede to it as non-nuclear-weapon States without delay and without conditions."
4. For an elaboration of these obligations and commitments see Regehr 2007.

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