

## A Fuel Cycle Association Would Encourage and Reward Strong NPT Compliance

We do not agree with Len Weiss (“What Would States Sacrifice for Nonproliferation?,” 18.1, March 2011, pp. 11–12) that our International Nuclear Fuel Cycle Association (INFCA) proposal entails any loss of national “sovereignty,” in the normal legal or territorial sense of that term, beyond that embodied in international contract law and a state’s continued voluntary compliance with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). In fact, our proposal was specifically designed to avoid this problem (see “Nuclear Islands: International Leasing of Nuclear Fuel Cycle Sites to Provide Enduring Assurance of Peaceful Use,” 17.3, November 2010, pp. 441–74). The covered civil fuel cycle facility can be decommissioned and dismantled at any time, terminating the association’s lease contract and returning full control of the site to the host nation or private owner, so there is zero loss of territorial sovereignty.

For states currently without fuel cycle facilities but desirous of acquiring them in the future, there is no unavoidable or imposed constraint on sovereignty, but rather a choice of two paths for exercising it: inside or outside of the voluntary association, which, like any voluntary association, requires its members to meet certain conditions and maintain standards of conduct to receive or sustain full membership benefits. This is no more or less a constraint on national sovereignty than agreeing to the constraints embodied in other international agreements or commercial contracts. A state can join the new INFCA arrangement and participate

in the establishment of a new global norm—or not.

When a nation joins the INFCA, the sole thing it irrevocably gives up is the future exercise of its sovereignty to employ the covered fuel cycle facility in a future nuclear weapons program. This is hardly a big internal step for states that have already sincerely accepted their NPT commitments, but it does provide significant and stabilizing nonproliferation assurance to the community of nations, and could also help to tilt the balance against future policy reversals in NPT states that may tend to view civil nuclear fuel cycle facilities as a military security hedge.

The purpose of the INFCA is emphatically *not* to confine nuclear fuel cycle capabilities permanently to a select group of existing supplier nations, but rather to ensure that any future expansion of these capabilities takes place in a manner that advances, rather than undermines, regional and global confidence in nuclear nonproliferation. Voluntary association membership would be grounded in the perception that all member states have a joint stake in achieving this outcome. It means that any member state seeking to deploy or expand its fuel cycle capabilities must—in addition to meeting all the association’s requirements for maintaining nonproliferation assurances—also present a business case to the other members demonstrating that either (a) its civil nuclear reactor fleet has advanced to a stage that credibly supports provision of domestic capacity for supplying nuclear fuel cycle services, or

(b) it can add value to its domestic uranium resources and effectively serve the needs of the other members of the association by moving up the value chain to provide conversion and/or enrichment services to the global market.

We see no reason at this point to conclude that these membership conditions, when clearly understood, will be perceived by any nation as an unacceptably onerous infringement on national sovereignty. After all, beyond the universal shared benefit of stronger nonproliferation assurance, prospective INFCA members would presumably join for the very strong assurances of international supply that membership entails.

Almost by definition, then, creation of the association would devalue the flimsy “energy security” claim that Iran and other nations fall back on to justify premature and blatantly uneconomic acquisition of sensitive nuclear fuel cycle facilities. Thus any loss of national sovereignty to freely invoke and act on this claim should ultimately be recognized by most countries as a *benefit*, not a liability, of our proposal.

Based on the broadly representative governance structure we have proposed, any future member-in-good-standing of the association with a sizable and credible national program for the peaceful use of nuclear energy is not likely to find the INFCA to be a permanent obstacle to the vindication of its NPT Article IV rights to enjoy the full use of nuclear technology exclusively for peaceful purposes. Subjecting the credibility of a nation’s peaceful purpose claim to the collective evaluation of its peers and prospective nuclear trading partners does not in our view represent an impairment of national sovereignty, but rather the exercise of a modicum of common sense.

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## In Defense of Nuclear Nonproliferation

The current US approach to nuclear proliferation in South Asia is, as other experts have argued and I agree, very risky.<sup>1</sup> This is the reason that in my book, *South Asian Security and International Nuclear Order: Creating a Robust Indo-Pakistani Nuclear Arms Control Regime*, I call for the revival of a US nonproliferation policy toward

South Asia that eventually leads to regional denuclearization.

In his review of my book in the November 2010 *Nonproliferation Review* (“Sparring on the Subcontinent,” 17.3, pp. 577–81), Sumit Ganguly does not find my policy recommendations “especially compelling” or “particularly relevant,” even though global and regional nuclear disarmament are back on the international agenda and there are certain indications that the Indian strategic elite has begun

<sup>1</sup> See for example Dinshaw Mistry, “Tempering Optimism about Nuclear Deterrence in South Asia,” *Security Studies* (January–March 2009), p. 181.

looking for a “Plan B” if the US Senate ratifies the Comprehensive Nuclear-Test-Ban Treaty.<sup>2</sup> Professor Ganguly believes that my recommendation that the United States renew the goal of regional denuclearization is “little more than the pursuit of a mirage,” yet during the 2010 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), India’s special status under the US-Indian nuclear deal was a considerable irritant. It will be very difficult for the Obama administration to make progress toward implementing the vision of a nuclear-weapon-free world without addressing the issue of the Indian and Pakistani nuclear arsenals and without the support of the overwhelming majority of the international community, represented by the non-nuclear weapon states party to the NPT.

Professor Ganguly claims that I misrepresent the historical record by arguing that “India possessed the capability to develop nuclear weapons in 1964” (as he put it). Yet in my book, I simply quote Karsten Frey’s excellent 2006 work, *India’s Nuclear Bomb and National Security*, in which Frey wonders why India developed a nuclear weapons-capable *infrastructure* before 1964, in the absence of any nuclear threat. This is not a spurious assertion, considering the ambiguities surrounding the term “going nuclear.”<sup>3</sup> Frey clearly

refers to what Stephen Meyer (in his 1984 book, *The Dynamics of Nuclear Proliferation*) called “the technological basis of nuclear proliferation,” not to an *actual* nuclear weapons program. My book does not question the historical fact that India only acquired the capability to produce weapon-grade plutonium free from non-proliferation controls when its plutonium reprocessing plant at Trombay began operating in 1966.<sup>4</sup> Admittedly, as Ashok Kapur notes (in his 1976 volume, *India’s Nuclear Option*), India had only “an *unproven* capacity to explode a [nuclear] device by 1964” (emphasis mine), and it acquired the technical capability to conduct a nuclear test only in 1972. But one still needs to explain why India waited until 1998 (the 1974 nuclear test was officially described as a “peaceful nuclear explosion”) to fully respond to the Chinese nuclear threat that emerged in 1964. As late as 1978, Prime Minister Indira Gandhi told Rodney Jones that India did not want nuclear weapons, because, “They only bring danger where there was none before” (quoted in my book, p. 77).

Professor Ganguly argues that my claim that India tested nuclear weapons in 1998 to gain international status is “fundamentally flawed.” In my book I argue that a constructivist explanation of the May 1998 tests is appealing because it shows that gaining recognition as a great power was more important to the Indian strategic elite than the security motivation. I recognize that “nuclear asymmetry with Pakistan was unacceptable” for India (p. 48 in my book) and that Chinese and Pakistani security threats play an important role in India’s nuclear decision making. However,

<sup>2</sup> See Indrani Bagchi, “NPT and Obama: How Long Can India Hold Out?” *Times of India*, October 17, 2009. On the nuclear abolitionist wave, see “Special Section: The Dynamics of Nuclear Disarmament: New Momentum and the Future of the Non-Proliferation Regime,” *Nonproliferation Review* 17 (March 2010), pp. 17–159.

<sup>3</sup> See for example Jacques Hymans, “When Does a State Become a ‘Nuclear Weapon State’? An Exercise in Measurement Validation,” *Nonproliferation Review* 17 (March 2010), pp. 161–80.

<sup>4</sup> See Leonard Spector, *The Undeclared Bomb* (Cambridge, MA: Ballinger, 1988), p. 114.

Frey provides extensive empirical evidence (a quantitative analysis of 705 editorial and opinion articles on the nuclear issue selected from five of India's major national newspapers) showing that the search for international status and recognition played a pivotal role in India's decision to test nuclear weapons in 1998. Other scholars criticize the idea that the Indian tests can be explained—as Professor Ganguly argues—by a “deteriorating security environment in South Asia as a consequence of clandestine Sino-Pakistani nuclear collusion.” For example, soon after India's 1998 test, researcher Gaurav Kampani argued that “there was no increased China threat that could justify India's overt nuclearization,” and scholar T.V. Paul believed that “as an aspiring major power, India's nuclear behavior can be understood better by using a systemic approach than by any other prevailing framework.”<sup>5</sup> I would argue that an important “systemic compulsion” explaining India's nuclear behavior in the 1990s was the search for membership in the “board of the world,” as one Indian observer nicely put it.<sup>6</sup> Professor Ganguly argues that “the quest for greater influence and standing in the global arena has been a constant in India's foreign policy since independence” and cannot explain the “timing” of the Indian tests, but this is an oversimplification of the history of India's foreign policy. India was much more of

what could be called a “revisionist state” in the 1950s, 1960s, and 1970s (identifying itself with the “Third World,” rather than with the great powers) than in the 1990s and 2000s, when it sought rapprochement with the United States, as epitomized by the US-India nuclear deal and its formal entrance into the “nuclear club.”

The purpose of *South Asian Security and International Nuclear Order* was not to get into the historical details of the Indian and Pakistani nuclear weapons programs, which have been well covered in the literature, but rather to explore the connections between Indo-Pakistani nuclear relations and the International Nuclear Order (INO) since the end of the Cold War. Professor Ganguly ignores my analysis of the debate on the INO and three possible scenarios in the twenty-first century, and he dismisses my belief that there was a real danger of escalation to the nuclear level during the post-tests nuclear crises and that in the absence of serious progress toward nuclear arms control the next crisis could lead to nuclear use. Yet several scholars have recently noted the dangers of the nuclear status quo in the subcontinent.<sup>7</sup>

I agree with Professor Ganguly's point that the United States should actively discourage India from its pursuit of anti-ballistic missile capabilities, but this point only highlights the existence of a real nuclear danger in South Asia and the

<sup>5</sup> Gaurav Kampani, “From Existential to Minimum Deterrence: Explaining India's Decision to Test,” *The Nonproliferation Review* 6 (Fall 1998), p. 16; T.V. Paul, “The Systemic Bases of India's Challenge to the Global Nuclear Order,” *Nonproliferation Review* 6 (Fall 1998), p. 3.

<sup>6</sup> Quoted in Teresita Schaffer, *India and the United States in the Twenty-First Century: Reinventing Partnership* (Washington, DC: Center for Strategic and International Studies, 2009), p. 209.

<sup>7</sup> Dinshaw Mistry, “Tempering Optimism about Nuclear Deterrence in South Asia,” *Security Studies* 18 (January–March 2009), p. 181; Vipin Narang, “Posturing for Peace? Pakistan's Nuclear Postures and South Asian Stability,” *International Security* 34 (Winter 2009/10), pp. 38–78; and Scott Sagan, “The Evolution of Pakistani and Indian Nuclear Doctrine,” in Scott Sagan, ed., *Inside Nuclear South Asia* (Stanford University Press, 2009), pp. 219–63.

urgent need to do something about it, going beyond the claim that nuclear weapons in South Asia are an irreversible reality, which unnecessarily constrains the debate of alternative policy options. My book is a modest contribution in that direction.

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**Errata**

In the March 2011 issue, one data point was mislabeled in Figure 1, “Linear Representation of the ‘Proliferation Paradigm’”

(p. 300). The South African nuclear program began in 1979 (and ended in 1991). We regret the error. In the survey on “Undergraduate Nonproliferation Education in the United States” in the March 2011 issue, an error in the statistical protocol employed by the authors resulted in minor miscalculations in some of the percentages cited; the overall conclusions of the article, however, remain unaffected. Corrected text, tables, and figures can be found in the Corrigendum. The survey also did not report that Georgetown University now offers an advanced graduate degree that focuses on nonproliferation: students in the Health Physics Program can choose to pursue a nuclear nonproliferation track. We regret the oversight.

The *Nonproliferation Review* welcomes input from its readers and encourages a dialogue on the topics covered and articles published in the journal. Please send all letters to Editor Stephen Schwartz, [sschwartz@miis.edu](mailto:sschwartz@miis.edu). Be sure to include your contact information, including mailing address. Letters may be edited for length, clarity, and style. The authors of the correspondence published in this section maintain the copyright to their letters.