

# U.S.-INDIA NUCLEAR COOPERATION

## Better Later than Sooner

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*On July 5, 2005, President George W. Bush and Indian Prime Minister Manmohan Singh signed an agreement pledging their governments to actions designed to culminate in a formal nuclear cooperation agreement that would end a three-decade U.S. nuclear embargo against India. Although the formal agreement has not yet received final approval from Congress, concerns about the consequences of the agreement, particularly its possible adverse effect on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the worldwide nonproliferation regime, have made the agreement controversial. This article traces the events that led to the Bush-Singh meeting, explicates the current situation, examines the arguments for and against the proposed agreement, and makes some preliminary judgments regarding the agreement's effects on the nonproliferation regime. The failure to prevent India's 1998 nuclear tests with the threat of sanctions (because the Indians calculated that long-term U.S. resolve was not sustainable) set in motion a chain of events that would ultimately end the nuclear embargo. However, the conditions for a better U.S.-India nuclear agreement—from a nonproliferation perspective—will inevitably arise if the current proposed agreement is not adopted.*

**KEYWORDS:** Nuclear power; India; United States; Treaty on the Non-Proliferation of Nuclear Weapons

The controversy over the proposed U.S.-India nuclear agreement stems from events that occurred in 1974, when India detonated its first nuclear explosive device at Pokhran. India's test was the first illegal use of civilian nuclear facilities and materials for nuclear explosive purposes.<sup>1</sup> In 1978 the U.S. Congress enacted the Nuclear Non-Proliferation Act (NNPA), establishing requirements for nuclear cooperation that included adherence to Full-Scope Safeguards.<sup>2</sup> India's refusal to accept such safeguards resulted in a nuclear embargo by the United States. The embargo was expanded in 1992 when the Nuclear Suppliers Group (NSG), currently consisting of 45 countries that set rules for nuclear trade by consensus, adopted full-scope safeguards as a criterion for exports to non-weapon states. This criterion was subsequently endorsed by the United Nations.

India's program moved along slowly at first, but after Pakistan began getting close to assembling its first nuclear weapon in the 1980s, the Indian program accelerated, with new designs requiring testing for reliability.

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### To Test or Not to Test

The timetable for new tests was moved up by the push by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) nuclear weapon states for a vote to extend the treaty indefinitely at the forthcoming 1995 NPT Review and Extension Conference rather than having it extended for a fixed period. In return for that vote, the weapon states proposed, among other things, the adoption of a Comprehensive Nuclear-Test-Ban Treaty (CTBT). As a result of a UN parliamentary ploy by Belgium and Australia, the vote on the CTBT was moved from the Conference on Disarmament (where India could have blocked the treaty) to the General Assembly, where it passed 158–3. India still had an ability to block the CTBT because of an agreement among the treaty's proponents that all "nuclear capable" states had to sign and ratify the treaty for it to go into effect. Thus, it appeared conceivable that India could end up having sole responsibility for making a universal CTBT unachievable, resulting in great pressure on India to sign. Indeed, India had made the first proposal calling for a ban on all testing in 1954 and had issued a statement in 1994 supporting the treaty.<sup>3</sup> China's detonation of a nuclear test, four days after the vote in May 1995 extending the NPT indefinitely, created in the minds of the Indian bomb lobby a perfect trifecta threatening Indian security: a China with tested nuclear weapons and all the privileges accorded a permanent member of the UN Security Council (UNSC); an NPT that relegates India permanently to second tier "non-weapon" status; and a forthcoming CTBT that could prevent India from testing new weapons designed to be delivered by Prithvi and Agni missiles.<sup>4</sup>

As a result, the bomb lobby pressured Prime Minister Narasimha Rao to authorize the tests.<sup>5</sup> Rao conducted a series of reviews that concluded that the tests could have an adverse economic impact on India.<sup>6</sup> He was informed that India would be subject to a stringent 1994 U.S. sanctions bill called the Nuclear Proliferation Prevention Act (NPPA) sponsored by Senator John Glenn (Democrat of Ohio).<sup>7</sup>

India decided to postpone the test after its review of the consequences. In April–May 1996, Indian national elections were held; the Congress Party was defeated, and the Bharatiya Janata Party (BJP) was asked to form a government, headed by Atal Behari Vajpayee. Although the BJP had supported a nuclearized India for three decades, and its campaign platform included exercising "the option to induct nuclear weapons," Vajpayee did not authorize the test during the 12 days he was in office before losing a vote of confidence. Did that forthcoming vote cause the postponement, or did the BJP need more time to understand the economic consequences of testing due to the U.S. legislation? In any case, the succeeding government, headed by H.D. Deve Gowda and later by Foreign Minister I.K. Gujral, also did not order a nuclear test. Three years went by before the BJP returned to power. The 1995 preparations for a test by India were still in place, and all that was needed was a government decision to "push the button," which the BJP provided.

It is apparent that the BJP felt sufficiently strong politically to withstand the political backlash from the economic sanctions against India that were expected to follow. They reasoned correctly that following an Indian test, Pakistan would be under domestic pressure to follow suit, and that, unless the United States changed its policy of treating India and Pakistan in an evenhanded way, the same sanctions would be visited on

Pakistan.<sup>8</sup> In that case, since the Pakistani economy was more vulnerable to economic sanctions than that of India, the United States would be risking an economic collapse in Pakistan with unknown consequences for the fate of Pakistan's nuclear weapons. In addition, sanctions for reasons other than helping U.S. businesses become more competitive in international markets are not a popular foreign policy tool with the U.S. business community or its loyal supporters in Congress. India undoubtedly felt it could take a calculated risk that the United States would either not impose the full panoply of sanctions under the NPPA or not keep them for long.<sup>9</sup> That turned out to be the case.

India's tests occurred on May 11 and 13, 1998, and were followed by Pakistan's tests on May 28 and 30.<sup>10</sup> The tests were denounced by the UN Security Council, which adopted UNSC Resolution 1172, calling on India and Pakistan to halt and roll back their weapons programs, sign the CTBT, and participate in negotiations toward a Fissile Material Cutoff Treaty (FMCT). Sanctions under U.S. law began to be imposed. The announcement of the sanctions caused a serious drop in the Indian stock market, and Pakistani foreign exchange reserves fell to a dangerous level. But the sanctions hurt business in the United States as well. Pakistan was about to request bids for the sale of \$40 million worth of wheat, a commodity that U.S. agricultural interests in a number of states had been selling to Pakistan for years using the Export Credit Guarantee Program. The sanctions would prevent that program from being used for Pakistan, probably making U.S. bids uncompetitive. Loud complaints from agricultural interests resulted in Congress, with the support of the Clinton administration, passing the Agricultural Relief Act of 1998 on July 14, which removed the restrictions on agricultural assistance to India and Pakistan. The following day, an amendment by Senator Sam Brownback (Republican of Kansas) was passed in the Senate giving the president the authority to waive all economic sanctions for a period of one year.

Meanwhile, a series of diplomatic talks with India had begun involving Deputy Secretary of State Strobe Talbott and Indian Minister for External Affairs Jaswant Singh. Fourteen such meetings were held in which Talbott tried to get India to sign a CTBT, freeze its production of fissile material and work toward an FMCT, develop no new missiles, improve export controls, and engage Pakistan on Kashmir.<sup>11</sup> Singh said that India would sign the CTBT only if the weapon states agreed to nuclear disarmament on a particular timetable, but he agreed to tighten India's export controls and start a dialogue with Pakistan.<sup>12</sup> The talks were clearly going nowhere, but the business community was lobbying heavily for lifting at least some sanctions, and on October 15, 1999, another Brownback amendment was passed, giving the president the authority to waive all NPPA sanctions on India and Pakistan with no sunset provision. In addition, the president could waive the sanction provisions of the Symington and Pressler amendments for Pakistan.<sup>13</sup>

This authority was exercised by President Bill Clinton the following month and in subsequent years, allowing, among other things, India and Pakistan to obtain loans and credits from international lending institutions, and Pakistan to get some military assistance from the United States, but the nuclear and other high-technology embargoes remained.

U.S. backtracking on sanctions in the face of egregious acts of proliferation had precedents. The Reagan and Bush administrations in the 1980s issued numerous waivers of sanctions for Pakistani violations of U.S. nonproliferation laws in order to support the

mujahideen in Afghanistan against the Soviets.<sup>14</sup> The actions by Congress and the Clinton administration in 1998 and 1999 showed that the United States could not tolerate the costs of some sanctions even in the face of the most visible evidence of proliferation—nuclear explosions. The short-lived sanctions had only a marginal effect on the Indian economy.<sup>15</sup> While the tests did not lead to an unraveling of the NPT regime, they had profound effects in other ways.

### **The Consequences of the 1998 Tests**

The Indian and Pakistani tests put a visible and seemingly irrevocable stamp of permanence on their nuclear programs because no state since the beginning of the nuclear age has given up a weapon program following an overt test.<sup>16</sup> Thus, the tests meant that the NPT was never going to be a universal treaty without amending it, a process whose complexity makes it virtually impossible to carry out.

Further, the tests slowed the momentum created at the 1995 NPT Review and Extension Conference toward progress by the weapon states in meeting their nuclear disarmament obligations under Article VI of the treaty. The weapon states had been under pressure to act on their disarmament commitments as a quid pro quo for the indefinite extension of the NPT. The Indian test made any substantive action by China in that direction difficult.

Pakistan's tests validated its program as a workable model for proliferators, and in their wake, A.Q. Khan publicly touted Pakistan's weapon technology as cheaper and safer than that of India.<sup>17</sup> The tests also underscored the hypocrisy underlying Indian and Pakistani expressions of peaceful intent for their nuclear programs in earlier years.

The permanency of the Indian and Pakistani programs raised the question of whether the denial of technology to outliers could be sustained for an indefinite period in a globalized commercial world, where pressures for increased trade and economic growth constantly rise. There is no historical precedent for maintaining such indefinite denial of trade and technology to countries for policy reasons unrelated to specific and direct national security concerns of the deniers. While nonproliferation is ostensibly considered a national security concern by all the states party to the NPT, in practice those concerns are frequently overridden by other issues.

Lastly, U.S. sanctions policy against testing was exposed, at least in this case, as a Potemkin village. Sanctions were not meant to be a bluff when they were enacted, but that is what they became. The U.S. goal of "cap, rollback, and elimination" of India's nuclear weapons program was at a dead end, a fact that became apparent in the Talbott-Singh discussions.<sup>18</sup> U.S. policy had to recognize the long-term reality of Indian nuclear weapons.

### **New Steps in U.S. Policy Toward India**

The 1998 tests caused a postponement in President Clinton's plans to visit India, but after he criticized Pakistan for its attack on the Indian Army at Kargil in 1999 he was issued a renewed invitation, which he accepted. The visit occurred in March 2000 and was a great success in

moving the U.S.-India relationship forward. U.S. companies signed agreements with Indian and Bangladeshi firms worth billions. U.S. Export-Import Bank support for U.S. exports to India, which was allowed via the exercise of a presidential waiver, was raised to \$2 billion, and some remaining economic sanctions stemming from the 1998 tests were lifted.

Later that year, Vajpayee paid a 10-day visit to the United States, where he addressed a joint session of Congress and was guest of honor at a state dinner at the White House. During his visit, additional Export-Import Bank financing to help Indian businesses purchase U.S. goods and services was announced. In addition, U.S. companies signed agreements to construct three large (non-nuclear) power projects in India, valued at \$6 billion.

But the Clinton administration, while strongly interested in improving bilateral relations with India, would not engage in any nuclear- or military-related trade as long as India refused to make any concessions regarding its nuclear program. India clearly felt that it needed to build its program further before giving any serious consideration to a CTBT or FMCT.<sup>19</sup> Its formulation for stating this was that it sought a “minimum credible deterrent,” which it had not yet achieved. These are restatements of the positions taken by both countries during the Talbott-Singh discussions. But the warming of relations since then, plus other factors, suggested already that the nuclear impasse could be overcome.

The time was clearly not ripe so soon after the nuclear tests for the United States to send a signal that a new nuclear policy toward India was under consideration. The politics were still too sensitive. But consider the following elements, which combine to make an eventual change in policy compelling.

First, the collapse of sanctions meant there was little downside to an Indian decision to produce more nuclear weapons. Thus, India now had little impediment to eventually reach its goal of a “minimum credible deterrent” regardless of how defined. Scholars of Indian doctrine have concluded that Indian decisionmakers view their nuclear weapons as a pure deterrent rather than as an instrument of war, meaning that a relatively small nuclear force would be enough to protect India from nuclear blackmail by China or Pakistan. Therefore, once having reached some sort of deterrent/prestige parity with its nuclear rivals, particularly China, India could then support a permanent test ban and a halt to its production of fissile material for weapons as long as China (and Pakistan—which was sure to follow) did the same. Moreover, having reached such a point in its nuclear development, it would make no sense for India to keep its breeder program unsafeguarded.

Second, unlike with Pakistan, there is no perception in the United States that Indian weapons are a national security threat to the United States. Third, there are growing mutual interests between India and the United States on international security and on improving economic ties.

Fourth, unlike with the Soviet Union during the Cold War, there is no ongoing reinforcement of antipathy toward India among the general U.S. population because of India’s past nuclear violations. There is no record of the sustainability of embargos for an indefinitely long period without an extant and clear national security threat.

Fifth, the growing problem of global warming, plus pro-nuclear propaganda that India’s expansion of nuclear power would help the global commons, can also feed public

support for a nuclear deal. Sixth, the growing power of the Indian diaspora in the United States is a powerful incentive for politicians to look with favor on a U.S.-India deal.

While these points would not be sufficient to engender support for India to be admitted to the NPT as a nuclear weapon state (which would be difficult to effect in any case due to the rules of the treaty), an alternative status recognizing India's weapons while requiring some nonproliferation standards accepted by weapon states but more stringent on safeguards was now feasible to consider in order for India to receive nuclear trade. If India, after achieving its "minimum credible deterrent," were to do what logic suggests—that is, accept a CTBT and FMCT and put its breeder program under safeguards—then, given the global warming situation, the desire to improve bilateral relations, and the force of domestic U.S. politics, the issue of India's failure to adopt full-scope safeguards would be bypassed, and almost any U.S. administration would find civilian nuclear trade with India politically acceptable. Thus, a nuclear relationship with India was simply a matter of time. Few, however, thought the time was ripe prior to the 2000 U.S. election. Attempting such an agreement at such an early time was bound to cause difficulties on all sides, especially with India's history of antipathy to global nonproliferation norms and the current insecurity and suspicions of its nuclear lobby.

### The Bush Administration's New Approach

When the Bush administration came into office, it decided to embark on a new approach to India.<sup>20</sup> The change was facilitated not only by the demonstrated failure of the United States to cap and roll back India's nuclear program, but also by certain ideological characteristics of the administration and some of its key personnel in foreign policy and domestic political strategy.

As is now well documented, the Bush administration has an institutional antipathy to arms control regimes. Many of its advisors were skeptical of arms control treaties and the NPT, and this was reflected in key appointments to the National Security Council and the State Department. These individuals regarded undisputed U.S. power and hegemony as the *sine qua non* for a more peaceful world. In pursuit of these aims, the nonproliferation policies of other countries would be judged more in terms of whether they constituted a threat to U.S. national security rather than whether they contributed to strengthening the international regime, though the latter remained a factor. Thus, while India was not an ally, its general outlook toward the United States was friendly, and its nuclear weapons were viewed as posing no direct threat. Moreover, its negative attitudes toward some nonproliferation initiatives, like the CTBT and FMCT, dovetailed with those of the administration.

Some high-level Bush appointees had a history of hostility toward China because of its economic and political system and increasing ability to challenge U.S. influence in the Asia-Pacific region. Although India's history of leading the non-aligned movement and its friendly relationship with the Soviet Union during the Cold War has never been forgiven by many right-wing U.S. "cold warriors," some were persuaded that India could play a role as a possible counterweight to the expansion of Chinese regional influence.<sup>21</sup> But for an Indian counterweight to be taken seriously in the eyes of some of the former cold warriors in the

Bush administration required not only that India not give up its nuclear weapons (which it would not do in any case as long as China and Pakistan possessed them), but also that its weapon program grow to constitute a greater symbol of its power and prestige in the region as well as a greater deterrent, if not a threat, to China. U.S. assistance to a civilian Indian nuclear program made sense from this perspective because such assistance would allow India to reserve its indigenous, limited, uranium resources for the production of more nuclear weapons.<sup>22</sup> This allowed the United States to claim that no violation of U.S. commitments to the NPT would result from U.S. assistance to India's civilian nuclear program, but the claim is challengeable if the result of U.S. assistance is more and faster Indian production of nuclear weapons.

In addition, a move toward a U.S.-India nuclear partnership was bolstered by the direct experience of both countries having suffered terrorist attacks (India with the attack on Parliament House on December 13, 2001, and the United States with September 11, 2001), so there was a common interest in ensuring that nuclear weapons and materials did not fall into the hands of terrorists. Hence, some nuclear communication between the two countries was needed in order to foster common approaches to export controls and related nonproliferation initiatives.

There were also domestic political benefits for the Bush administration in a nuclear deal with India. The president was heavily supported in both of his election campaigns by U.S. nuclear energy interests, defense contractors, and other corporate interests that would benefit greatly from U.S.-India nuclear and other high-technology trade.<sup>23</sup> A strategic partnership with India would thus enable a possible revival of a U.S. nuclear export market and the sale of expensive weapon systems that would bring billions of dollars to some of the administration's chief supporters.<sup>24</sup> In addition, the Indian-American community was becoming increasingly affluent and politically sophisticated. This must have looked like a golden opportunity to President Bush's Senior Advisor Karl Rove and others who might have seen in a U.S.-India deal a possible shift in Indian-American political attitudes toward the Republican Party, with contributions to match.

In order to carry out its new India policy, the Bush administration had to decouple India and Pakistan in pursuing its strategic goals in Asia. Pakistan was important in providing a base for U.S. operations against Al Qaeda and the Taliban in Afghanistan, but its nuclear record precluded any nuclear cooperation beyond aiding its ability to protect its nuclear weapons from being stolen and used by terrorists or renegade elements of the military. Moreover, Pakistan's friendly relationship with China meant that it could not be useful in aiding any U.S. policy toward containing or counteracting Chinese influence in the region. The Pakistanis were not happy about a U.S.-India deal, but they were powerless to prevent one from going forward. They could, of course, use their leverage over the United States vis-à-vis Afghanistan to extract more economic and military aid from the United States, and they have done so. In 2005, the Bush administration authorized the sale to Pakistan of F-16s, aircraft that can be easily modified to carry nuclear weapons, thereby reversing a 15-year-old U.S. embargo on such sales to Pakistan. Subsequently, on June 28, 2006, Congress was notified of an intended initial sale of at least 18 F-16s. Some members of Congress were upset by what they viewed as inadequate consultation on the sale since Congress has only 30 days to reject a sale once notification has been officially

given.<sup>25</sup> The deal was concluded on September 30, 2006, despite the congressional opposition.<sup>26</sup>

### **The Benefits for India**

Under the proposed agreement, India comes as close to *de jure* recognition of its status as a nuclear weapon state as one can without having signed the NPT. While India will not receive direct assistance to its nuclear weapons program, no longer will the existence of its weapons program obstruct India's ability to obtain high-technology goods, including advanced weapon systems and space-related technology from the United States.<sup>27</sup> This also seals a hole in the pipeline to India for such goods that was created by the collapse of the Soviet Union. In addition, dual-use goods helpful to India's military program are likely to receive less scrutiny as a result of a partnership with the United States.

India's growing economy also requires increased energy resources that India cannot provide indigenously if it wishes to continue its nuclear weapon program at current levels.<sup>28</sup> Cooperation with suppliers of both non-nuclear and nuclear forms of energy will enable India to come closer to meeting its goals for sustainable development. Recognition and acceptance of its weapon program removes a barrier to such cooperation with industrialized states in the West.

India's competition with China for regional (and ultimately global) economic and political power, along with its drive to obtain a permanent seat on the Security Council of the United Nations, is likely to be enhanced by a strategic partnership with the United States. And the strengthening of U.S. domestic constituencies invested in India's stability and security will naturally occur as a result of boosted U.S. investment. The status of the Indian diaspora and its ability to affect U.S. government policy toward Indian interests are enhanced by a strategic partnership.

Thus, with the need for a new U.S. nuclear policy toward India having been made manifest following the 1998 tests, the interests of both the Bush administration and India with regard to the region, the fight against terrorism, and the desire for expanded trade, plus the disdain shared by both toward the formal structure of the nonproliferation regime, a civilian nuclear agreement became both possible and desirable.

On July 5, 2005, President Bush and Prime Minister Singh signed a historic agreement in New Delhi on a program for civilian nuclear cooperation between the United States and India. The agreement provided for India to propose a plan for separating its nuclear program into two branches: a safeguarded civilian part, and an unsafeguarded military program. Only the civilian part would be involved in nuclear trade with the United States. In addition, India agreed to maintain its voluntary moratorium on nuclear testing, strengthen its export controls, and improve the physical security of fissile materials. The U.S. negotiators reportedly tried to get India to make its testing moratorium permanent, but India, as expected, refused. Indeed, Bush's plans for coming to New Delhi had been set in motion prior to the close of negotiations on the content of the announcement, and the negotiating impasse with India was unresolved as the president prepared to leave. (Some reports said that the agreement was being worked on up to a few minutes before the scheduled announcement.) To avoid the embarrassment of landing in New Delhi and

then having to leave without an agreement, the president ordered the U.S. negotiators to settle all outstanding issues before the announcement. This gave the Indians the whip hand in the race to conclude an agreement. Thus, except for the unavoidable separation plan, India did not have to alter any aspect of its domestic or foreign policy in order for the announcement of a prospective U.S.-India nuclear agreement to go forward.

Despite U.S. concessions, the idea of a separation plan made the Indian nuclear establishment uneasy, for it had become used to having a relatively free hand in building and operating all of India's indigenous nuclear facilities, including making use of electricity-producing power reactors for military purposes when needed. The unease was not vitiated by the details of the plan as announced on March 2, 2006, and elaborated on May 11, 2006. Although the plan provided for eight existing and planned reactors along with the entire breeder program to be kept on the unsafeguarded military side, and despite complete Indian control over the designation of new nuclear facilities as military or civilian, some in the nuclear establishment saw the commitment to put 14 existing and planned reactors under International Atomic Energy Agency (IAEA) safeguards (of which six were already subject to safeguards) as the camel's nose under the tent. Would India be pressured to extend safeguards to all subsequent new facilities, and would there be interference with military operations by the IAEA to ensure that no crossover was occurring between the civilian sector and the military sector? The discomfort of leading nuclear weapons scientists in India, which would morph into outright opposition at a later stage, was in contrast to the generally favorable reaction of India's mainstream media. But rumblings of opposition were growing within the Indian parliament, which had been effectively shut out of consultation during the negotiations leading to the Bush-Singh announcement. The governing coalition, called the United Progressive Alliance (UPA), is dominated by the Congress Party but includes four left-wing parties (the Left Front) that could bring down the government in a vote of confidence. These parties, of which the Communist Party of India (Marxist) is the largest, saw the impending nuclear agreement as a move toward a strategic partnership with the United States that they opposed. The BJP, the main opposition party to the UPA, has in the past looked with favor on mutually supportive strategic and nuclear ties with the West, but it expressed opposition to the proposed nuclear agreement on grounds of negative impingement on India's national security and sovereignty. These complaints became louder as the agreement evolved. Yet the vast majority of the Indian diaspora was enthusiastic, and plans were set up to lobby Congress for the deal. In the United States, meanwhile, a number of arms control and nonproliferation organizations began their own activities in opposition to the agreement.

### **The Proponents Make Their Case**

In a policy disagreement of this kind, where public pressure on Congress could determine the outcome, it is not unusual for arguments to tend toward overstatement, but some arguments on the proponents' side were demonstrably false.

For example, in public statements both Secretary of State Condoleezza Rice and Indian Ambassador Ronen Sen suggested that the deal would increase oil supplies and/or bring down petroleum prices because of nuclear power replacing oil in the Indian

economy.<sup>29</sup> As of 2005, only about 1 percent of central electricity generation in India was fueled by oil. Even if one could use nuclear power to also replace the diesel fuel that farmers in rural areas use to produce electricity locally, there is no possibility of Indian nuclear power making a dent on the world petroleum market anytime soon, if ever. Under India's own projections and plans for how it can achieve energy independence by 2030, nuclear energy would contribute less than 10 percent to the energy mix needed to meet India's electricity needs in 2030.

Another false claim made by some proponents was that the deal helps "cap" the Indian weapon program by increasing the number of facilities under safeguards. But a "cap" usually means a limit in the ability to grow. There is nothing in the agreement that prevents India from making more nuclear weapons. In fact, in addition to continued operation of its plutonium production reactors Dhruva and CIRUS, India has about 2 tons of plutonium in the spent fuel from its unsafeguarded power reactors that could be used for weapons.<sup>30</sup> Moreover, by importing nuclear fuel for its civilian reactors, India will be able to use all its indigenous uranium resources for weapon production. Under the separation agreement, India retains the sole authority to determine whether any new facility will be civilian (and therefore subject to safeguards), or military. And when its breeder program, which is entirely on the military side, becomes fully operational, India will have an ability to produce even larger amounts of weapon materials than it does now. But while this is certainly undesirable from a nonproliferation perspective, it fits with a U.S. objective to build up India as a counterweight to China.

Other claims by proponents are not necessarily false but are difficult to evaluate. Even if one grants that the deal can boost India's position vis-à-vis China in the region, the natural question to ask is, "So what?" There is a tacit assumption that this would mean that India could help make the region friendlier toward the West and the United States in particular. But India's own desire for good relations with China, its colonial history, and its concomitant desire not to be anyone's handmaiden in foreign policy matters are not necessarily going to result in following any U.S. lead in Asia-Pacific affairs.

But other claims by proponents carry some weight. The deal will provide more market share for U.S. high-tech defense sales, nuclear sales, and space-technology related sales.<sup>31</sup> It will encourage India to be more supportive of some U.S. activities in fighting terrorism, although its support for one of the Bush administration's most prominently touted tools, the Proliferation Security Initiative (PSI), is unclear.<sup>32</sup> India may also be more supportive of U.S. initiatives in the United Nations, but probably not in the case of seeking draconian sanctions on Iran, which India depends on for natural gas supplies and oil. Also, helping India with nuclear power that replaces coal will help reduce greenhouse gases, though not in the most cost-effective manner. Although India does need more energy production, its main energy problem is distribution, and considering the state of India's grid, distributed sources of supply plus increased investments in end-use efficiency would produce more benefits for the Indian population and the environment in the intermediate term than will nuclear power.<sup>33</sup> In the longer term, India plans to use its significant thorium reserves to build an electrical energy sector based on the use of breeders fueled in part by uranium-233, a fissile isotope of uranium produced by irradiating thorium. The technical difficulties of building and operating a thorium-cycle

breeder are daunting, and the failure thus far by industrialized countries with more conventional plutonium breeder programs to make them work—or work economically—raises serious questions about the viability of India's long-term nuclear plans. Even assuming the technical issues are overcome, a commercially successful thorium breeder is decades away from realization with or without a U.S.-India nuclear agreement.

### Convincing Congress

As the issues raised by the agreement began being debated in India and the United States, the Bush administration proceeded with its plan to present draft legislation to Congress enabling a nuclear agreement with India. Some administration insiders backed by the nuclear industry wanted a straight repeal of the offending provisions in the Atomic Energy Act of 1954 that prevented nuclear trade with India. But the administration decided that a complete backtrack from support for full-scope safeguards would be considered a major retreat from U.S. nonproliferation policy and would be denounced by the nuclear suppliers, among others, as a violation of NSG rules. Accordingly, the administration bill provided for the president to waive the full-scope safeguards provision for India if he made a series of determinations that India was doing what it agreed to do in the Bush-Singh announcement. Because the completion of those actions by India, such as negotiating and signing a safeguards agreement, was likely to take many months, and the administration was anxious to get congressional support early, the presidential determinations were couched in the language of progress toward reaching goals, rather than in having reached the goals themselves. The administration plan was to get the enabling legislation passed quickly so that it could be used as a lever to obtain NSG support for altering its own rules to allow nuclear trade with India.

But the administration overreached in its bill. It not only asked Congress to essentially approve nuclear trade with India in advance of a completed Section 123 agreement (named after the relevant section of the Atomic Energy Act governing nuclear cooperation with other states) and a completed safeguards agreement, but the bill allowed the president to waive all sanctions that would result from an Indian nuclear test or from Indian assistance to other non-weapon states on nuclear weapons development. Moreover, the bill eliminated the requirement of a congressional vote of approval for the Section 123 agreement, which was provided for under current law for agreements missing certain provisions like the full-scope safeguards requirement.

Congress balked at this attempt to diminish its power and prerogatives and allow the possibility of nuclear trade in the event of nuclear testing or the spread of bomb technology by India. Accordingly, when the Senate and House produced their own bills in March and June of 2006, respectively—introduced by Senator Richard Lugar (Republican of Indiana) and Representative Henry Hyde (Republican of Illinois)—congressional prerogatives and certain sanctions were restored. Over the next couple of months, hearings were held in both Houses, and lobbying efforts for and against the agreement grew in intensity.

During this period, I talked to many staff and a few members of Congress regarding the agreement. Interestingly, staffers from both political parties tended to be more

skeptical of the agreement than were their bosses. Some members of Congress may have been conflicted about the agreement, but went for it for political reasons. Republicans, in particular, were aware of the declining fortunes of the president because of the war in Iraq, and, like the White House, might have seen the U.S.-India agreement as portending a rare foreign policy success for the administration. In addition, the level of lobbying was deep and persistent, led by the former ambassador to India (and an architect of the "new strategic partnership") Robert Blackwill.<sup>34</sup> The Indian-American community spent millions of dollars in fees and campaign contributions, hiring the best lobby shops in Washington to ply their case.<sup>35</sup> And the powerful Israel lobby joined in, led by the American Israel Public Affairs Committee and the American Jewish Committee, raising the question of whether Israel might seek a similar deal if India was successful. Recent reports have confirmed that discussions of such a deal took place between Israeli and U.S. officials soon after the Bush-Singh meeting in 2005.<sup>36</sup> So far, the United States has declined such a deal, but Israel is considered likely to persist.<sup>37</sup>

Congressional hearings about the proposed legislation refined the arguments of proponents and opponents alike. The arguments of the opponents of the agreement were almost entirely on nonproliferation grounds. They argued that selling nuclear fuel to India for its civilian reactors would alleviate a documented shortage of indigenous uranium that would then enable India to devote those resources exclusively to the purpose of making more nuclear weapons. In addition, the agreement was said to undermine part of the "grand bargain" of the NPT, by which non-weapon-state signatories can obtain nuclear technology assistance only in return for not making nuclear weapons and agreeing to full-scope safeguards. Moreover, India, by refusing to agree to a fissile material production cutoff, was doing less than the weapon states under the NPT. Finally, except for the separation plan, the deal required no substantive changes to India's nuclear policies.

The administration's main argument focused on the importance of the "strategic partnership" with India, the latter characterized and emphasized as a relatively democratic country with one-sixth of the world's population, and with an economy growing at an amazing 8 percent per year. Cooperation on nuclear energy and on energy projects generally, as well as on space technology, would benefit U.S. firms and bring the partnership still closer. These arguments were well received.

But the proponents continued to make claims that were dubious. They understood that the main arguments against the agreement would be on nonproliferation grounds, so they advanced the argument that the deal would benefit the nonproliferation regime. They claimed that U.S. assistance would encourage India to rely on U.S. expertise in strengthening its nuclear export control system. This suggests that in the absence of U.S. nuclear assistance, India would not wish to use and rely on U.S. expertise and experience to protect its exports from being used for nefarious purposes. But such cooperation, if India wants it, does not depend on having a nuclear agreement. Russia has been perfectly willing to allow U.S. experts to help it improve physical security at its nuclear facilities without any sort of agreement on nuclear energy cooperation. Moreover, the passage of UNSC Resolution 1540 requires India and all other nations to improve their export controls in accordance with strict standards to protect against weapon materials falling into the hands of terrorists or being delivered to proliferating countries. As a victim of terrorism

itself, and having seen the effect of lax controls in facilitating the weapon program of Pakistan, India is already well motivated to strengthen its export control system. The Bush-Singh announcement of 2005 did put India on record as volunteering to refrain from transfers of enrichment and reprocessing technologies to states that do not already possess them, and to maintain its voluntary moratorium on nuclear testing. But these were already part of Indian nuclear policy.

Further, proponents claimed that India's acceptance in principle of safeguards on all its civilian nuclear facilities combined with its voluntary commitments described above put India "inside the nonproliferation regime." Depending on what that means, the claim is either meaningless or specious. India already accepts safeguards on four of its currently operating reactors, so the acceptance of safeguards is not new. Further, although the agreement means more (India-specified) reactors will be under safeguards, India retains the unilateral right to determine whether there will be any others in the future, something that only weapon states can do under the NPT. Indeed, under the agreement, India has fewer obligations in some respects than the weapon states. Among other things, it is not under obligation to engage in good faith negotiations toward nuclear disarmament, as the weapon states must do under Article VI of the NPT. Despite the evident holes in the nonproliferation arguments in favor of the agreement, the political momentum for the agreement swept all rebuttals aside.

### **Congress Passes its Versions of the Enabling Legislation**

After a number of rounds of hearings, the House marked up its bill, H.R. 5682, and passed it on July 21, 2006. As expected, it kept the procedures of the NNPA for approving an excepted agreement, that is, requiring a congressional vote of approval by joint resolution. But it relinquished congressional authority to review export licenses periodically. The House bill also kept the NNPA sanctions (Section 129 of the Atomic Energy Act) for testing and other violations, except for past nuclear tests and ongoing internal nuclear weapon development activities in India. The bill mandated that any safeguards had to be permanent, that exports would terminate if India transferred items in violation of NSG or Missile Technology Control Regime (MTCR) guidelines, and that the president must issue an annual report on whether U.S. assistance is, directly or indirectly, assisting India's nuclear weapon program. It also urged the president to lobby against fuel supply for India by other suppliers if the United States terminates cooperation because of U.S. law. But in a sign that Congress was already in the grip of election-year politics fueled by a well-heeled lobby campaign that helped secure Democratic as well as Republican support, plus the desire by Republicans to give a president with plummeting approval ratings a foreign policy accomplishment, Congress showed that it would not let nonproliferation concerns get in the way of pleasing powerful constituencies. Two House floor amendments designed to give greater voice to nonproliferation concerns were soundly defeated: an amendment by Representative Howard Berman (Democrat of California) requiring the United States to withhold transfers of fuel until India ceases fissile material production for weapons, and an amendment by Representative Brad Sherman (Democrat of California) requiring the president to certify that India has not increased the level of domestic

uranium used in its military program during the preceding year in order to qualify for a shipment of fuel in the current year.

The Senate bill, S. 3709, was similar to the House version but contained a few variations. For example, the Section 123 agreement had to meet all the requirements in the NNPA except full-scope safeguards. Also, export of equipment, materials, or technology related to enrichment or reprocessing or production of heavy water was prohibited except under restrictive conditions involving bilateral or multilateral R&D programs approved by the IAEA or the United States. In addition, end-use monitoring was required to ensure that India was complying with relevant requirements, terms, and conditions of U.S. export licenses, and fallback safeguards were mandated if the IAEA could not carry out its safeguards responsibilities. Finally, the president's waivers of U.S. law for India were tied to Indian support of UN activities and sanctions regarding Iran. India viewed this as an attempt by Congress to dictate India's foreign policy.

As with the House, the Senate bill retained a ban on nuclear testing by India, but other considerations of nonproliferation were overridden by the lobbying juggernaut favoring the deal. Every amendment offered on the Senate floor to strengthen nonproliferation requirements was defeated. These included an amendment by Senator Byron Dorgan (Democrat of North Dakota) to require that India commit to act as if it was an NPT weapon state, an amendment by Senator Jeff Bingaman (Democrat of New Mexico) to require a finding that India has stopped producing fissile materials for weapons before any nuclear materials are exported, and an amendment by Senator Russell Feingold (Democrat of Wisconsin) requiring the president to determine that U.S. cooperation does nothing to assist, encourage, or induce India to manufacture or acquire nuclear weapons or other nuclear explosive devices.

On November 16, 2006, the Senate passed its version of H.R. 5682 by a vote of 85–12. None of the prominent candidates for president in 2008 voted against it. Nor was there any attempt to filibuster the bill before the vote.

### **The House-Senate Conference Report (The Hyde Act)**

The many concessions granted to India in the respective bills did not satisfy Indian desires. In response to Indian complaints, Secretary Rice sent a letter to members of the House-Senate Conference on H.R. 5682 asking for changes on behalf of the administration. The changes tracked the Indian complaints in general, but Rice did not request rescinding the cutoff that would occur if India tested a nuclear device. Nor did she request that Congress carve out any additional exemptions from the requirements of Section 123 of the Atomic Energy Act. Congress accepted most, but not all, of the requested changes, and compromised on others. The language requiring Indian cooperation on Iran was demoted to a policy goal.

The Conference Report on H.R. 5682, melding the two versions of the legislation into one, renamed H.R. 5682 as the Henry J. Hyde U.S.-India Peaceful Atomic Energy Cooperation Act of 2006 (honoring the Chair of the House Committee on International Relations) and passed both houses on December 9, 2006 by voice vote. The heart of the Hyde Act is Section 104, which allows the president to waive the requirement of full-scope

safeguards for India, the requirement of periodic congressional review of export licenses under an excepted agreement, and sanctions for Indian proliferation activities prior to the date of enactment, if the president makes the following determinations:

- India has provided a credible plan to separate civil and military activities.
- India and the IAEA have concluded all legal steps required prior to signature of an agreement for safeguards in perpetuity on India's civil nuclear program.
- India and the IAEA are making substantial progress toward concluding an Additional Protocol (allowing more intrusive inspections by the IAEA and enhancing the likelihood that a state in noncompliance with its nonproliferation obligations will be caught).<sup>38</sup>
- India is working actively with the United States "for early conclusion" of a multilateral FMCT.
- India is working with and supporting United States and international efforts to prevent the spread of enrichment and reprocessing technology and facilities to any state that does not already possess such full-scale facilities.
- India is taking necessary steps toward securing nuclear and other sensitive materials and technology, including through enactment of comprehensive export controls and harmonization with NSG and MTCR policies.
- The NSG has decided to permit supply to India of nuclear items covered by the guidelines of the NSG.

The aforementioned determinations are no longer effective if the president determines that India has detonated a nuclear explosive device after the date of enactment of the conference report.<sup>39</sup>

The Conference Report also retained a number of additional requirements:

- The Section 123 agreement must be submitted to Congress for review under Atomic Energy Act (NNPA) procedures for an excepted agreement.
- Transfers are subject to U.S. obligations under NPT Article I, which disallows any assistance to a non-weapon state for the acquisition of nuclear weapons.
- Transfers are subject to NSG guidelines (tacitly assumed to no longer contain a full-scope safeguards requirement for India).
- Nuclear transfers to India terminate if an Indian person transfers nuclear or dual-use material, equipment, or technology not consistent with NSG guidelines, or transfers missile or dual-use equipment or technology not consistent with MTCR guidelines. (The president can continue trade if it is determined that termination would seriously prejudice achievement of U.S. nonproliferation objectives or otherwise jeopardize the common defense and security of the United States; or if the president determines that the government of India did not know of the transfer or did not own or control or direct the person who made the transfer, or if the president certifies that India has taken adequate judicial or enforcement action against the Indian person.)
- Exports of enrichment, reprocessing, and heavy water technology are allowed if and only if: the recipient is a multinational facility participating in an IAEA-approved program to provide alternatives to national fuel cycle capabilities; the transfer is made pursuant to a multilateral or bilateral program to develop a proliferation-resistant fuel

cycle; safeguards against diversion are effective; and the export will not assist in the acquisition of nuclear weapons or production of fissile material for weapons.

- The president shall ensure that all appropriate measures, including end-use monitoring, are taken to maintain U.S. compliance with NPT Article I.
- Congress is to be fully and currently informed of any significant nuclear activities in India and their implications, including noncompliance with the agreement, construction of nuclear facilities, significant changes in India's production of nuclear weapons or fissile material, and changes in purpose or status of unsafeguarded nuclear fuel cycle activities.
- Congress is to receive an annual report containing information on India's exercise of its commitments under the agreement and on the entire Indian nuclear program.

### **The Basis of India's Opposition to the Hyde Act**

The Hyde Act drew support from all the major Indian-American business groups that lobbied for the deal, but in India the law was roundly criticized by the opposition BJP, both of India's Communist parties, and elements of the nuclear establishment.<sup>40</sup> Despite Rice's intervention prior to the House-Senate conference, the Indian government still had reservations about the Hyde Act and the application of Section 123 requirements. These included:

- the halting of cooperation in the event of a nuclear detonation—Indian weapon scientists feel that testing is still critical for them because the 1998 tests were not a complete success (in one test the secondary stage of a thermonuclear device failed to have its secondary stage ignite);<sup>41</sup>
- the right of the United States following an Indian test to require the return of transferred items and materials;
- a policy statement that the United States should ensure that fuel shipments are sent commensurate with operational need to prevent excessive stockpiling;
- a policy statement that the United States should seek to prevent transfers to India from other suppliers in the event of Indian violations of the agreement;
- the requirement contained in provisions for an end-use monitoring program of fallback safeguards in case the IAEA is unable to implement safeguards as arranged pursuant to Section 123 of the Atomic Energy Act;
- references in the bill to expected cooperation with the United States on Iran;
- the retention of U.S. consent rights on enrichment and reprocessing of materials of U.S. origin or that have been produced in a U.S.-supplied reactor;
- restrictions on nuclear trade involving enrichment and reprocessing technologies.

In a discussion of the proposed U.S.-India agreement in India's parliament on August 17, 2006, Prime Minister Singh underscored India's objections to provisions of the Hyde Act and U.S. nuclear law:

"We seek the removal of restrictions on all aspects of cooperation and technology transfers pertaining to civil nuclear energy—ranging from nuclear fuel, nuclear reactors,

to reprocessing spent fuel, that is, all aspects of a complete nuclear fuel cycle. . . . We will not agree to any dilution that would prevent us from securing the benefits of full civil nuclear cooperation.

"We will not accept any verification measures regarding our safeguarded facilities beyond those contained in an India-specific Safeguards Agreement with the IAEA. Therefore there is no question of allowing American inspectors to roam around our nuclear facilities.

"We are not willing to accept a moratorium on the production of fissile material.

"The U.S. has been intimated that reference to nuclear detonation . . . as a condition for nuclear cooperation is not acceptable to us."<sup>42</sup>

On the question of cooperation with the United States on Iran, Singh stated: "India's foreign policy will be decided on the basis of Indian national interests only." Singh made it clear that India was prepared to walk away from an agreement that did not satisfy India's requirements. This was reinforced by a drumbeat of complaints about the Hyde Act in the Indian press by former high-level officials.<sup>43</sup>

Some of the concerns in the Hyde Act expressed by the Indians were addressed by the signing statement issued by Bush when he signed the bill into law. He wrote that he will consider statements of policy in the bill as advisory only.<sup>44</sup> This means that language in Section 103(a)(6) of the bill that makes it U.S. policy to seek to prevent other suppliers from transferring nuclear equipment, materials, or technology that has been denied to India under U.S. law will not necessarily be enforced. Likewise for Section 103(b)(10), which is meant to limit nuclear fuel reserves to an amount commensurate with reasonable reactor operating requirements, and likewise for Section 103(b)(4), which makes it U.S. policy to secure India's full and active participation in actions to dissuade, isolate, and sanction Iran for its nuclear enrichment activities. Ignoring duly passed legislation has become a hallmark of the Bush presidency (some 750 such signing statements have been issued since the president took office in 2001).<sup>45</sup> But the president could not ignore specific elements of law written into the Hyde Act, such as the mandated cutoff of nuclear trade if India were to explode a nuclear device.

### **The Section 123 Negotiations and the Formal Agreement**

The remaining issues raised by India became the subject of a series of hard negotiations over a period of months. The intensity of these talks was illustrated by the direct involvement of Vice President Richard Cheney, Secretary of State Rice, National Security Advisor Stephen Hadley, Indian Foreign Minister Pranab Mukherjee, Indian Foreign Secretary Shivshankar Menon, and Indian National Security Advisor M.K. Narayanan. Both sides had moved from their initial bargaining positions, but Indian movement was dictated by the statutory restrictions of U.S. law and the understanding that Congress was unlikely to legislate further on India's behalf. The U.S. negotiators, however, in facilitating the Indian reconciliation with reality, moved significantly away from their initial positions, and in so doing undermined some of the restrictive provisions in the Hyde Act. The main issues were resolved in the formal agreement as follows:<sup>46</sup>

- The United States has agreed to help India obtain fuel from other suppliers and to create a strategic fuel stockpile for its reactors to mitigate the effects of any interruption of supply, including presumably a cutoff due to another Indian nuclear test.<sup>47</sup>
- Although the Hyde Act and Section 129 of the Atomic Energy Act require ceasing nuclear cooperation in the event of an Indian nuclear test, the agreement does not stipulate that a test result in an automatic cutoff of nuclear supply, but rather immediate “consultations.” Among other things, these consultations would involve consideration of the circumstances under which the test took place, for example, whether it was a response to testing by China or Pakistan, or indeed by the United States. The implication of this provision is that circumstances might induce the United States to ask Congress to legislate continuing nuclear trade with India after an Indian test has occurred. The consultations could also involve joint activity to ensure continuity of fuel supply by other suppliers, or the manner in which the United States will exercise its right to demand the return of nuclear equipment, material, and fuel it has supplied to India. This right, which has been part of every Section 123 agreement for non-weapon states since enactment of the NNPA, and which was reinforced by the Hyde Act, could not be negotiated away by the United States, but the agreement calls for fair-market compensation for any return of previous transfers.<sup>48</sup>
- Consultations are also mandated prior to the establishment of any fallback safeguards if the IAEA determines that its safeguards are no longer being applied on U.S. supplied material, equipment, or facilities in India. Since the prime minister has told the Indian Parliament that no Americans will be allowed to roam around Indian nuclear facilities, there is a question of who would provide the fallback inspections on Indian facilities, if needed.
- The U.S. denial of transfers of enrichment and reprocessing technology and components, except under narrow exceptions as provided in the Hyde Act, has been retained and could change only by congressional approval of an amendment to the agreement.
- In another precedent-setting major departure from past U.S. policy, the United States has given India, a non-NPT party, prior programmatic approval (in principle) for reprocessing of U.S.-origin spent fuel or other spent fuel from a U.S.-supplied reactor. Such reprocessing must take place in a dedicated, safeguarded facility that India has agreed to provide. However, the precise arrangements for such reprocessing will be the subject of consultations to begin within six months of an Indian request to exercise the U.S. approval, with discussions on such arrangements to be concluded within one year.
- Barring any termination by either party, the agreement will remain in force for 40 years, and unless terminated at the end of the 40-year period, will be extended for 10 more years and then in 10-year increments thereafter as long as both parties agree.

Thus, while India had no choice but to accept the strictures in the Hyde Act if it wanted an agreement, it managed to get the U.S. negotiators to work around some of those strictures, minimizing their effect on India’s nuclear program. In return for major concessions by the United States to alleviate the trade consequences of nuclear testing

and to give India programmatic permission for reprocessing, India gave up practically nothing. This is clear from the report that the U.S. concessions were “warmly welcomed” at a joint meeting of the Indian Cabinet Committees on Security and Political Affairs in New Delhi.<sup>49</sup> Indian Foreign Minister Mukherjee said: “All concerns of India have been reflected and have been adequately addressed.”<sup>50</sup>

## Indian Internal Opposition

The anodyne announcements of the Indian negotiators notwithstanding, criticism of the agreement within the Indian parliament and the nuclear weapons scientific community intensified, with the focus now being the Hyde Act and the remaining NNPA restrictions on nuclear assistance. Among other things, the opponents complained that the Hyde Act and the NNPA prevented India from unconditionally receiving all aspects of fuel cycle technology and protection from sanctions in the event of nuclear explosive testing. However, even Anil Kakodkar, chairman of the Indian Atomic Energy Commission, recognized that if the United States were to acquiesce to Indian wishes in these areas, it would be making an exception for India that it has not made for its closest allies.<sup>51</sup> Nonetheless, opposition to the agreement by the BJP, the Left Front, and factions in the nuclear weapons scientific community grew louder. Whether the Left Front is prepared to let the government fall over the agreement is unclear, but the prime minister has political fences to mend if he is to avoid that outcome.

The BJP, which would like the government to fall, previously favored a nuclear agreement and would normally have no problem with a deal that bolstered Indian nuclear weapon production. However, it has denounced this agreement, saying the party “is of the clear view that this agreement is an assault on our nuclear sovereignty and our foreign policy options.”

Nuclear scientists in India appear to be split, with officials of the Indian public sector company that constructs nuclear power projects favoring it and some former directors of the labs engaged in weapon design and fuel cycle research opposed.<sup>52</sup>

Basically, the complaints over the Section 123 agreement are a reiteration of complaints made in the wake of the 2005 Bush-Singh announcement, now made more specific following the release of the agreement’s text. The claim that India’s sovereign rights are being impinged on is based partly on the requirement of the agreement’s termination and the U.S. right to demand return of transferred items in the event of a nuclear test and partly on policy statements in the Hyde Act expressing the expectation of Indian foreign policy becoming “congruent” with that of the United States. Much political hay has been made in India of a public statement by former Assistant Secretary of State Stephen G. Rademacher that the Bush-Singh agreement allowed the United States to “coerce” India into casting two votes to refer Iran’s IAEA file to the UN Security Council.<sup>53</sup> That was bound to touch a political nerve considering India’s colonial history.

It is too early to tell whether all this internal opposition means the agreement is in trouble. It could mean significant delays in its implementation, at least until the political problems are worked out. In the meantime, a special blue ribbon panel has been formed by Prime Minister Singh to review the content of the Section 123 agreement and the Hyde

Act in light of the concerns of the opponents. It would be a surprise if the conclusion of the panel was anything other than that the agreement is a good deal for India. Whether that would be enough to forestall the Left Front from causing the government to fall on a vote of no confidence is hard to say.

### The Final Steps

There are still three major hurdles that must be cleared before the U.S.-India agreement becomes part of U.S. law. First, India must negotiate a safeguards agreement with the IAEA on its civilian program that is acceptable not only to the United States, but also to the members of the NSG. India has agreed to accept safeguards "in perpetuity" if it receives nuclear fuel supply guarantees in perpetuity, and the Section 123 agreement outlines a U.S. role in satisfying India's requirement. But the details of India's safeguards agreement with the IAEA are still being negotiated and will take some additional time to complete before any judgment can be made as to their adequacy.

Second, for India to receive nuclear trade under NSG rules requires that the NSG change its rules, which, since 1992, require all non-weapon states (as defined by the NPT) to accept full-scope safeguards. The NSG operates by consensus, so one member could ostensibly block the change. Pressures from other members are sure to make this scenario unlikely, but it is not inconceivable that a group of members could object and be able to withstand the pressures from the United States, France, Russia, and the United Kingdom, all of whom have indicated that they will vote for the change in rules. (China has also indicated support for the change but is unlikely to lobby for it and has expressed preference for a non-India specific change that could include Pakistan.) Since all the NSG members who are non-weapon states are NPT signatories, and are therefore required to accept full-scope safeguards, their vote to change the rules for India would mean that they are willing to relax a requirement for India that they themselves must meet. In addition, some NSG parties have indicated that they are not willing to vote on changing the rules for India until they examine the safeguards agreement and the Section 123 agreement. This creates a complication since India insists that it will not enter into a safeguards agreement until all restrictions on nuclear trade have been lifted, meaning both U.S. and NSG approval. Further, the NSG has the ability to add conditions to its relaxation of rules for India, for example, requiring continued Indian adherence to its voluntary test moratorium, or restricting trade with India in the areas of enrichment and reprocessing. Thus, whether, and how, the NSG will change its rules for India is still not entirely clear.

Third, the U.S. Congress must vote to approve the Section 123 agreement. While a positive vote is likely, given the vote on the Hyde Act, U.S. concessions on the Section 123 agreement, particularly on fuel assurances and the approval of reprocessing, will give some members pause, because they represent a major shift in U.S. policy and a challenge to the spirit if not the letter of the Hyde Act.<sup>54</sup> On reprocessing, in the past the United States has given programmatic consent to the European Atomic Energy Community (Euratom), Japan, Norway, and Sweden as part of their Section 123 agreements. U.S. support for reprocessing in Western Europe and Japan preceded the policy of restriction

on reprocessing in nuclear agreements that were put into law by the NNPA in 1978.<sup>55</sup> Moreover, none of the countries that have been given such programmatic approvals have any record of violating any nuclear contract with the United States, and the two weapon states that are members of Euratom (France and the United Kingdom) are no longer producing any plutonium for weapons and have agreed to a permanent end to nuclear testing.

The U.S. concessions on Section 123 continue a pattern established during the negotiations that led to the July 2005 Bush-Singh announcement. The United States came into those negotiations with "hard" positions on a fissile material production cutoff and on the question of safeguards for the breeder program.<sup>56</sup> The safeguarded Japanese breeder program was held up as the example that India should and could follow. But India held fast, and, as indicated earlier, the U.S. negotiating team was ordered by the president to complete the agreement, which they did by giving in to the Indian positions. Something similar may have happened on the 123 agreement. In an interview, Indian National Security Advisor Narayanan states that the U.S. State Department lawyers working with Undersecretary Nicholas Burns were difficult negotiators, but "with [U.S. National Security Adviser] Hadley it was easy." He continued, "There were two basic issues of reprocessing and right of return which were finalized. And it was obvious I had an ally."<sup>57</sup>

Recent events have made all these concessions to India even more problematic. Four Indian nationals were indicted by a U.S. court earlier this year on charges of violating U.S. law by exporting sensitive technology to India, including special heat-resistant computer chips with applications in missile-guidance systems and microprocessors for use in aircraft navigation systems.<sup>58</sup> The items were exported to three Indian government entities. In addition, seven powerful members of Congress sent a letter to Prime Minister Singh on May 2, 2007, expressing their "grave concern" regarding the aforementioned indictments, India's establishment of a "joint defense working group" with Iran, and the broadening of India-Iran economic relations via activities that would be subject to U.S. action under the Iran Sanctions Act.<sup>59</sup>

It is apparent that Congress will carefully examine the Section 123 agreement with India's possible current violations of U.S. law and the concessions given to it in mind. India-Iran relations are likely to also play a role in Congress's review.<sup>60</sup>

A rejection of the agreement by Congress, although it is unlikely, would hurt India more than the United States. Rejection would mean that India continues its status of nuclear non-recognition and as a target of nuclear embargo by the world community. On the U.S. side, one has to distinguish between any losses by the country as opposed to the loss to the Bush administration. The country's loss would be minimal and mainly in terms of some lucrative private-sector contracts and some short-term displeasure from India. This would be more than counterbalanced by the restoration of the status quo ante regarding nuclear trade with non-signers of the NPT. With respect to any U.S. desire to use India to "contain" China or provide a better model for other countries in the region to emulate, it is difficult to see how India's nuclear arsenal will make up for its deficiencies in development vis-à-vis China or have a significant effect on the current India-China relationship, especially as both countries are in the process of increasing their mutual trade.<sup>61</sup> There is no evidence of Indian interest in being used as a handmaiden of the U.S. in pursuit of a

policy of strategic containment of China. The same is true for India-Iran relations, which will be strengthened if the natural gas pipeline currently being discussed by the two countries with Pakistan becomes a reality. As for the environment, Indian nuclear power will have a miniscule effect on the global commons for decades. U.S. non-nuclear, non-defense trade with India is likely to continue at its current high rate of growth.<sup>62</sup>

The Bush administration, however, would see rejection as a great loss because of its desire to contain China and stop Iran's nuclear program, and its belief that Indian cooperation is important to both. Rejection would also mean a waste of the large expenditure of political capital the Bush administration used to get the agreement to its present stage, and the inevitable charge of incompetence directed at its beleaguered foreign policy team. Recognition of such pressures were undoubtedly factored into the successful Indian negotiation strategy.

The U.S.-India agreement, if it goes through, will undoubtedly be a matter for discussion at the Preparatory Committee (PrepCom) meetings of the 2010 NPT Review Conference, some of which will occur prior to the NSG plenary meeting at which a vote on changing NSG rules for India is expected. The PrepCom meetings may provide a clearer indication of the impact of the nuclear agreement on the nonproliferation regime.

From India's perspective, states party to the NPT should have no problem with this agreement because India's outlier status is, in India's view, an accident of bad timing. It is indeed probable that had the NPT been negotiated a few years later, after India's 1974 nuclear test, India would have been admitted to membership as a nuclear weapon state with all the rights and privileges pertaining thereto. Moreover, India's history, culture, and geography have combined to create a sense of national pride and a feeling of inevitability about its ultimate role as a regional and world power. Given this national narrative, and the fact that both India and China were in similar economic circumstances at the time of adoption of the NPT, China's accession to the status of a nuclear weapon state party to the treaty made it politically impossible for India to accept a "lesser" position as a non-weapon state. But the NSG is under no obligation to accept any country's national narrative or ambitions as a reason for relaxing its rules for that country. Israel could make a claim similar to that of India and perhaps back it up with evidence that it was in possession of the bomb at the time of the adoption of the NPT.<sup>63</sup> Moreover, there is the precedent-setting example of South Africa, which made nuclear weapons, dismantled them and its program to the satisfaction of the IAEA, and then signed the NPT as a non-weapon state.

But what this underscores is the difficulty that stems from dividing the world into nuclear haves and have-nots. India was right to argue over the years that the NPT was discriminatory and that non-nuclear states party to the treaty are under "hard" obligations under Articles II and III, while the obligations of weapon states under Article VI to disarm come with no benchmarks or timetables. But, whether one likes it or not, the treaty has been and remains the best instrument for creating and maintaining a global norm of nonproliferation. Universal rules allow the application of collective pressure by the world community against proliferators. The alternative is for the most powerful to decide unilaterally who shall possess such weapons and who shall not. That is not a formula for

world peace. The proper response to the Indian argument is for the weapon states to take their obligations more seriously, not to relax the rules for non-weapon states.

### Repercussions for the Nonproliferation Regime

In retrospect, the attempt to get India to abandon or roll back its nuclear weapon program in the absence of any movement by the weapon states toward disarmament was politically quixotic. On the other hand, giving India recognition as a weapon state without NPT portfolio and without requiring India to do what all the weapon states under the NPT are currently committed to do—stopping the production of fissile material for weapons—is a serious departure from the norm that has developed over the past three decades. Moreover, the fact that India was the first country to convert illegally a civilian nuclear facility, which was provided with explicit requirements of peaceful use, to a weapon facility, needs to weigh heavily in any decision to regularize nuclear trade. Regardless of any objective national security justification for the 1974 Pokhran test, the latter was a bold challenge to U.S. nonproliferation policy and peaceful-use contractual requirements that could not be ignored then and should not be ignored today, considering that the civilian research reactor that produced the plutonium for the Pokhran test is still producing plutonium for India's weapon program.<sup>64</sup> Among the bizarre features of U.S. acceptance of India's nuclear separation plan is the acceptance of the CIRUS reactor being placed on the military side, as if the history and peaceful provenance of the facility does not exist. In recognition of this problem, India has agreed to shut down the reactor in 2010.

If the agreement goes through, the nonproliferation atmosphere will be bad, but no one can be sure of the practical effect on the nonproliferation regime. One cannot escape the fact that signing a nuclear agreement with a state that is not only an NPT outlier but also actively assembling a nuclear weapon arsenal undermines the treaty's basic principles. No doubt the agreement will produce louder than normal complaints from NPT non-weapon states about the failure of weapon states to provide nuclear assistance under Article IV of the treaty. But, as the Bush administration has argued, the states party to the NPT remain committed to the treaty as a matter of their own national interest. So, regardless of the content of the Section 123 agreement or the action of the NSG or IAEA, a nuclear agreement with India is unlikely to result in defections from the treaty. On the other hand, it may make the imposition of stronger safeguards on non-weapon states more difficult. One ambassador from an NSG country said that had he known that a U.S.-India nuclear agreement was in the works, he would have thought twice about recommending that his government sign onto the Additional Protocol of the IAEA.<sup>65</sup> Since a substantial number of countries have yet to sign onto or ratify the Additional Protocol, an inability to persuade more countries to permit intrusive inspections could be a significant adverse effect of the U.S.-India agreement.

The U.S. standing as a nonproliferation leader has, to some extent, already become a casualty of the proposed deal. On its face, U.S. nonproliferation policy has arguably become one of indulging its friends even if they flout the world's rules, while practicing denial and sanctions against violators that are U.S. enemies. The failure to get Indian

agreement to stop producing fissile material for weapons as a condition of nuclear supply and to allow India to use all its indigenous uranium for weapons as it feeds its civilian reactors with imported uranium will be interpreted by some as a U.S. violation of Article I of the NPT, especially in light of the concessions on the Section 123 agreement. Nuclear trade with India, unless carefully proscribed, means more weapons and weapon materials in South Asia and an increased risk of nuclear terrorism. Sustaining an international behavioral norm in nuclear matters will be more difficult under these circumstances.<sup>66</sup> Although Iranian defiance of the United States and others over its nuclear program was not caused by the U.S.-India agreement, the agreement was referenced at one point by Iran's chief nuclear negotiator, Ali Larijani, in rebutting some public criticism directed against Iran. Certainly, the U.S.-India agreement gives the Iranian hardliners some ammunition in silencing internal dissent over their nuclear program.

Despite the positive features of the Hyde Act, it is apparent that U.S. nonproliferation laws have been badly frayed by the U.S.-India agreement. On the other hand, some sanctions in U.S. law have been retained, and India cannot count on continued indulgence by future administrations in the event of nuclear testing, other Section 129 violations of the Atomic Energy Act, or violations of other nonproliferation laws. While Bush may consider the policy prescriptions in the Hyde Act as advisory, a future president need not do so. But even if the best face is put on the U.S. capitulation to India's nuclear demands on testing, fuel assurances, and reprocessing, there still remains the question of whether the United States is being prudent in entering into such an agreement with India under these conditions. Much may depend on the degree to which a U.S. president is inclined to use the many loopholes built into the law by Congress to allow nuclear trade with India following the discovery of violations. The dynamics of international diplomacy and the desire not to disrupt ongoing bilateral relations with friends can bias such decisions to the detriment of the nonproliferation regime.

It is hard to escape the conclusion that the contentiousness and risks raised on all sides by this agreement mean that the agreement is premature. Simply waiting would present the opportunity for a much better agreement from a nonproliferation standpoint. Some time in the not-too-distant future, India's nuclear development will reach its goal of a "minimum credible deterrent." There is no evidence in India's history or national security strategy to suggest that India would then behave differently from other weapon states in terms of ability and willingness to turn a voluntary testing moratorium into a permanent one and to stop producing no longer needed fissile material for weapons.<sup>67</sup> At that point, all other things being equal, much opposition to a nuclear agreement with India would likely disappear. At least the notion that a nuclear agreement could help India make more nuclear weapons would no longer be an issue. Thus, time can cure the current agreement of some major ills. Therefore, no one should mourn the loss of this agreement if Congress (or the NSG) turns it down. Some observers worry that if Congress rejects the agreement, it will damage U.S.-India relations. Such damage, to the extent that it might exist, would be short-lived. U.S.-India relations have been improving for many years and are likely to continue improving independent of any nuclear agreement.<sup>68</sup>

Though the Bush administration will view its efforts as having achieved a foreign policy "victory," all the compromises may make such a victory Pyrrhic, particularly if the

dominant view of the agreement becomes that it is an unprincipled naked grab for lucrative trade and geopolitical advantage by the United States and other suppliers. In that case, the nonproliferation regime will have suffered a significant blow. The NPT may remain intact, but its meaning and its effect will be considerably reduced. Is this risk worth taking when the conditions for a result much less harmful to nonproliferation are likely to arise by simply waiting? To ask this question is to answer it.

## NOTES

1. In 1956, Canada sold India a nuclear research reactor named CIRUS (Canadian-Indian Reactor, U.S.) into which U.S. heavy water was placed as a moderator and coolant. Although the reactor was not safeguarded (international safeguards did not exist at the time), the sales contracts for both the reactor and the heavy water specified a requirement of "peaceful use." India was told in writing in 1970 that the use of the heavy water for nuclear explosive purposes would be a violation of the terms of sale of the material, but it went ahead four years later with a nuclear explosion, using plutonium produced in the reactor. Had safeguards been available and in place, it would have been much more difficult for India to divert the materials from peaceful use.
2. Senator John Glenn (Democrat of Ohio) was the chief sponsor of the NNPA, and I was the chief architect and drafter of the Senate version that became law. Full-Scope Safeguards refer to a system of inspections and material accounting on all nuclear activities in a country in accordance with the rules of the International Atomic Energy Agency.
3. India withdrew its support in 1995. See George Sibley, "The Indian Nuclear Test: A Case Study in Political Hindsight Bias," WWS 547, Woodrow Wilson School of Public and International Affairs, August 7, 2002.
4. The Indians need not have worried about the CTBT. The U.S. Senate voted to reject its ratification on October 13, 1999, and neither the Bush administration nor, until recently, the Senate, has shown any interest in revisiting that decision.
5. For an explication of the Indian position, see Arundhati Ghose, "Negotiating the CTBT: India's Security Concerns and Nuclear Disarmament," *Journal of International Affairs* 51 (Summer 1997), <[www.indianembassy.org/policy/CTBT/ctbt\\_ghose.htm](http://www.indianembassy.org/policy/CTBT/ctbt_ghose.htm)>.
6. George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley: University of California Press), 1999. See also Praful Bidwai and Achin Vanaik, *South Asia on a Short Fuse* (Oxford University Press, New Delhi, 2001), pp. 71, 98. See also Strobe Talbott, *Engaging India: Diplomacy, Democracy, and the Bomb* (Washington, DC: Brookings Institution Press, 2004), pp. 37–38.
7. Public Law 103-236. These sanctions incorporated sanctions contained in earlier legislation sponsored by Senator Glenn. The earlier legislation included a 1977 amendment to the Foreign Assistance Act that cut off economic and military assistance for nuclear testing that the president could waive; the ability to waive was removed in another amendment by Glenn passed in 1981. But the inclusion of bans on credits and loans in the NNPA made the possible effect of sanctions much more serious. See Randy Rydell, "Giving Nonproliferation Norms Teeth: Sanctions and the NNPA," *Nonproliferation Review* 6 (Winter 1999), pp. 1–19, <[cns.miis.edu/pubs/npr/vol06/62/rydel62.pdf](http://cns.miis.edu/pubs/npr/vol06/62/rydel62.pdf)>.
8. Talbott, *Engaging India*, p. 59.
9. *Ibid.*, p. 127. Talbott heard reports that Prime Minister Vajpayee believed sanctions would start to erode after six months, and for corroboration references Raj Chengappa, *Weapons of Peace: The Secret Story of India's Quest to be a Nuclear Power* (New Delhi: HarperCollins India, 2000).
10. It may be a coincidence or an example of Indian irony that the May 11 test was on the third anniversary of the vote giving the NPT an indefinite extension.
11. See Talbott, *Engaging India*, p. 63. Pakistani General Jehangir Karamat is quoted as speculating that India believed its test would result in economic pressures by the United States on an economically vulnerable Pakistan if the Pakistanis tested as well.
12. Sumit Ganguly, "Giving India a Pass," *ForeignAffairs.org*, August 17, 2005, <[www.foreignaffairs.org/20050817faupdate84577/sumit-ganguly/giving-india-a-pass.html](http://www.foreignaffairs.org/20050817faupdate84577/sumit-ganguly/giving-india-a-pass.html)>.

13. The latter amendments caused a cutoff of economic and military assistance to Pakistan because of its bomb program. See Robert M. Hathaway, "Confrontation and Retreat: The U.S. Congress and the South Asian Nuclear Tests," *Arms Control Today* 30 (January/February 2000), <[www.armscontrol.org/act/2000\\_01-02/rhjf00.asp](http://www.armscontrol.org/act/2000_01-02/rhjf00.asp)>.
14. In a June 1992, Senator John Glenn wrote: "the Reagan and Bush administrations have practiced a nuclear nonproliferation policy bordering on lawlessness. In so doing, they have undermined the respect of other countries for U.S. law and have done great damage to the nuclear nonproliferation effort. Keep this in mind the next time someone in the administration extols the need for military action to deal with some power hungry dictator who is seeking to acquire nuclear weapons in the Middle East or elsewhere." John Glenn, "On Proliferation Law, A Disgraceful Failure," *International Herald Tribune*, June 26, 1992.
15. Daniel Morrow and Michael Carriere, "The Economic Impacts of the 1998 Sanctions on India and Pakistan," *Nonproliferation Review* 6 (Fall 1999), <[cns.miis.edu/pubs/npr/vol06/64/morrow64.pdf](http://cns.miis.edu/pubs/npr/vol06/64/morrow64.pdf)>.
16. South Africa, which officially terminated its nuclear weapon program in 1990, may have participated in a disputed Israeli test in 1979. Argentina, Brazil, Taiwan, South Korea, and others who had engaged in R&D activities on weapons never got that far.
17. See "Interview with Abdul Qadeer Khan," *The News*, Islamabad, May 30, 1998, <[nuclearweaponarchive.org/Pakistan/KhanInterview.html](http://nuclearweaponarchive.org/Pakistan/KhanInterview.html)>.
18. That is not to say that a policy of "carrots" would have been more successful, since such a policy failed to prevent the Pakistani bomb.
19. It is ironic that India proposed a cutoff of fissile material production during the negotiations on the NPT. See K. Subrahmanyam, *Indian Security Perspectives* (New Delhi: ABC Publishing House, 1982).
20. See Ashley J. Tellis, "India as a New Global Power: An Action Agenda for the United States," Carnegie Endowment Report, July 2005, <[www.carnegieendowment.org/files/CEIP\\_India\\_strategy\\_2006.FINAL.pdf](http://www.carnegieendowment.org/files/CEIP_India_strategy_2006.FINAL.pdf)>.
21. Condoleezza Rice, "Campaign 2000: Promoting the National Interest," *Foreign Affairs* 79 (January/February 2000), <[www.foreignaffairs.org/20000101faessay5/condoleezza-rice/campaign-2000-promoting-the-national-interest.html](http://www.foreignaffairs.org/20000101faessay5/condoleezza-rice/campaign-2000-promoting-the-national-interest.html)>.
22. This was a strategy publicly touted by some Indian defense strategists. See K. Subrahmanyam, "India and the Nuclear Deal," *Times of India*, December 12, 2005, <[timesofindia.indiatimes.com/articleshow/1327306.cms](http://timesofindia.indiatimes.com/articleshow/1327306.cms)>. In a 2006 report, Ashley Tellis attempts to refute the argument that U.S. assistance to India's civilian program will help its bomb program by asserting that India's uranium problem is insufficiency of mining and milling capacity, which "is being corrected, and the transient shortages of natural uranium currently facing the country could disappear within the next several years." Leaving aside the admission that India has a uranium production problem, it is unclear how long "several years" entails, given the continuous failure of the Indian nuclear sector to meet its production goals by wide margins. It is also unclear if domestic Indian politics could tolerate a trade of years of electricity shortages and/or clean air in Mumbai and elsewhere for maximal production of nuclear weapons. It seems unlikely that a venerable defense strategist like Subrahmanyam would endorse a strategy guaranteed to raise hackles among U.S. nonproliferation officials and put the agreement at risk if there was no need to do so. See Ashley J. Tellis, "Atoms For War? U.S.-Indian Civilian Nuclear Cooperation and India's Nuclear Arsenal," Carnegie Endowment Report, June 2006, <[www.carnegieendowment.org/files/atomsforwarfinal4.pdf](http://www.carnegieendowment.org/files/atomsforwarfinal4.pdf)>.
23. See Center for Responsive Politics, "A Money in Politics Backgrounder on the Energy Industry," May 16, 2001, <[www.opensecrets.org/pressreleases/energybriefing.htm](http://www.opensecrets.org/pressreleases/energybriefing.htm)>. See also William Hartung and Michelle Ciarrocca, "The Ties that Bind: Arms Industry Influence in the Bush Administration and Beyond," World Policy Institute, October 2004, <[www.worldpolicy.org/projects/arms/reports/TiesThatBind.html](http://www.worldpolicy.org/projects/arms/reports/TiesThatBind.html)>.
24. See Sharad Joshi, "Commercial Motivations Add Impetus to Indo-U.S. Nuclear Agreement," *WMD Insights*, Issue 15, May 2007, pp. 31–40, <[www.wmdinsights.com/PDF/WMDInsights\\_May07Issue.pdf](http://www.wmdinsights.com/PDF/WMDInsights_May07Issue.pdf)>.
25. See William Matthews, "U.S. Lawmakers Rip State Over Pakistan F-16 Process," *DefenseNews.Com*, July 21, 2006, <[defensenews.com/story.php?F=1969406&C=airwar](http://defensenews.com/story.php?F=1969406&C=airwar)>.
26. Rhea Myerscough, "Update: United States and Pakistan Break F-16 Stalemate," Center for Defense Information, October 4, 2006.

27. For a discussion of the space cooperation aspect of the proposed U.S.-India agreement, see Richard Speier, "U.S. Satellite Space Launch Cooperation and India's Intercontinental Ballistic Missile Program," in *Gauging U.S.-Indian Strategic Cooperation*, Henry Sokolski ed. (Washington: Strategic Institute Publications Office, 2007), pp. 187–214, <[www.npec-web.org](http://www.npec-web.org)>.
28. Zia Mian, A.H. Nayyar, R. Rajaraman, and M.V. Ramanna, "Fissile Materials in South Asia and The Implications of the U.S.-India Deal," *Science and Global Security* 14 (2006), pp. 117–143.
29. See Leonard Weiss, "Power Points," *Bulletin of the Atomic Scientists* 62 (May/June 2006), pp. 21, 63, <[thebulletin.metapress.com/content/d71g6943ph8ju506/fulltext.pdf](http://thebulletin.metapress.com/content/d71g6943ph8ju506/fulltext.pdf)>.
30. Much of that material, however, is more likely headed for fuel for India's breeder program rather than directly for weapons. Still, the production of large amounts of weapon-usable materials, even if intended for civilian applications, creates an inviting terrorist target and risk of theft, which is compounded in India by the absence of safeguards. India has used its unsafeguarded power reactors for both civilian and military purposes, and unraveling this intertwining of weapon and power programs explains India's proposed "phasing in" of safeguards in accordance with the separation agreement. India wishes, however, to maintain a weapon option for the breeder program, and the United States has acquiesced to India's decision to keep the breeder program unsafeguarded.
31. Nuclear sales are likely to be in the areas of fuel and certain engineering services. The United States is unlikely to be economically competitive with France or Russia in selling reactors to India.
32. On PSI, Prime Minister Singh stated to the Indian parliament on August 17, 2006: "We cannot accept it as a condition for implementing the [July 2005 nuclear cooperation agreement]. We have certain concerns regarding its legal implications and its linkages with the NPT."
33. Weiss, "Power Points." See also John Stephenson and Peter Tynan, "Will the U.S.-India Civil Nuclear Cooperation Initiative Light India?" in Sokolski, *Gauging U.S.-Indian Strategic Cooperation*, pp. 15–70, <[www.npec-web/books/20070300-npec-gaugingus-indiastratcoop.pdf](http://www.npec-web/books/20070300-npec-gaugingus-indiastratcoop.pdf)>.
34. See Robert D. Blackwill, "The India Imperative," *National Interest*, Summer 2005, <[www.nationalinterest.org/Article.aspx?id=10828](http://www.nationalinterest.org/Article.aspx?id=10828)>.
35. Subrata Ghoshroy, "U.S.-India Nuclear Deal: Triumph of the Business Lobby," Report, MIT Center for International Studies, September 2006.
36. Mark Hibbs, "U.S. Rebuffed Israeli Request for Exemption from NSG Trade Rule," *Nuclear Fuel*, January 1, 2007, p. 1.
37. Neal Sandler, Mark Hibbs, and Daniel Horner, "Israel Counting on U.S.-India Deal to Further Power Reactor Project," *Nucleonics Week*, August 16, 2007, p. 1.
38. See "Cluster 2: Implementing Provisions of the NPT Related to the Nonproliferation of Nuclear Weapons," statement by Christopher A. Ford, U.S. special representative for nuclear nonproliferation to the 2007 Preparatory Committee for the Treaty on the Non-Proliferation of Nuclear Weapons, Vienna, Austria, May 9, 2007, <[www.state.gov/t/isn/rls/rm/85167.htm](http://www.state.gov/t/isn/rls/rm/85167.htm)>.
39. A cutoff of nuclear trade with India would also occur if India violated the other prohibitions contained in Section 129 of the Atomic Energy Act that the Hyde Act did not allow the president to waive.
40. See ANI dispatch, "Reject Indo-US nuclear deal: BJP," *DailyIndia.com*, December 10, 2006. S. Denyer, "Indian Government's Left Allies Slam U.S. Nuclear Deal," *Reuters*, December 11, 2006. See also, "Scientists Concerned over Nuclear Act Passed by U.S. Congress," *The Hindu*, December 10, 2006, <[www.hindu.com/thehindu/holnus/001200612101911.htm](http://www.hindu.com/thehindu/holnus/001200612101911.htm)>.
41. Mark Hibbs, "India May Test Again Because H-Bomb Failed, U.S. Believes," *Nucleonics Week*, November 26, 1998, p. 1.
42. See *The Hindu* Online, "Excerpts From PM's Reply to Discussion in Rajya Sabha on Civil Nuclear Energy Cooperation with the United States," August 17, 2006, <[www.hindu.com/nic/indousdeal.htm](http://www.hindu.com/nic/indousdeal.htm)>.
43. For example, on the issue of reprocessing and enrichment technology restrictions, the former director of the Bhabha Atomic Research Center, A.N. Prasad, said such restrictions would mean a continuation of denials of supplies and equipment on the international market.
44. George W. Bush, "President's Statement on H.R. 5682, the 'Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006,'" December 18, 2006, <[www.whitehouse.gov/news/releases/2006/12/20061218-12.html](http://www.whitehouse.gov/news/releases/2006/12/20061218-12.html)>.
45. Charlie Savage, "Bush Challenges Hundreds of Laws," *Boston Globe*, April 30, 2006, <[www.boston.com/news/nation/articles/2006/04/30/bush\\_challenges\\_hundreds\\_of\\_laws](http://www.boston.com/news/nation/articles/2006/04/30/bush_challenges_hundreds_of_laws)>.

46. *Agreement for Cooperation Between the Government of India and the Government of the United States of America Concerning Peaceful Uses of Nuclear Energy* (123 Agreement), August 1, 2007, <[www.state.gov/r/pa/prs/ps/2007/aug/90050.htm](http://www.state.gov/r/pa/prs/ps/2007/aug/90050.htm)>.
47. See Nicholas Kralev, "U.S. Will Help India to Obtain Nuclear Fuel," *Washington Times*, July 26, 2007, <[www.washingtontimes.com/apps/pbcs.dll/article?AID=/20070726/FOREIGN/107260074/1003](http://www.washingtontimes.com/apps/pbcs.dll/article?AID=/20070726/FOREIGN/107260074/1003)>.
48. On the other hand, although the United States has, on nonproliferation grounds, taken back spent fuel from research reactors it has sold to other countries, there has been considerable ongoing opposition by environmental groups to the notion of importing power reactor spent fuel or other large amounts of radioactive materials from other countries. Thus, the practicality of demanding the return of certain materials in the event of an Indian nuclear test is questionable, but the return of fresh fuel or certain kinds of equipment would not present a problem.
49. Kralev, "U.S. Will Help India."
50. *Ibid.*
51. Siddharth Varadarajan, "India's Anti-Iran Votes Were Coerced, Says Former U.S. Official," *Hindu*, February 16, 2007, <[www.thehindu.com/2007/02/16/stories/2007021605671200.htm](http://www.thehindu.com/2007/02/16/stories/2007021605671200.htm)>.
52. T.S. Subramanian, "'No Possibility of Any Interruption': Interview with Anil Kakodkar, Chairman, Atomic Energy Commission, and Secretary, Department of Atomic Energy," *Frontline* 24 (August 11–24, 2007), <[www.flonnet.com/fl2416/stories/20070824501201300.htm](http://www.flonnet.com/fl2416/stories/20070824501201300.htm)>.
53. T.S. Subramanian, "Euphoria and Fear," *Frontline* 24 (August 11–24, 2007), <[www.flonnet.com/fl2416/stories/20070824501401800.htm](http://www.flonnet.com/fl2416/stories/20070824501401800.htm)>.
54. On July 25, 2007, a letter signed by 23 House members led by Representative Edward J. Markey (Democrat of Massachusetts) was sent to President Bush expressing concerns about possible inconsistencies between the Section 123 agreement and U.S. law, including the Hyde Act, <[markey.house.gov/index.php?option=content&task=view&id=3003&Itemid=125](http://markey.house.gov/index.php?option=content&task=view&id=3003&Itemid=125)>.
55. The policy of no longer considering reprocessing as an inevitable part of the nuclear fuel cycle was announced by President Gerald Ford in a statement made five days before the presidential election of 1976. This policy was extended by his successor, President Jimmy Carter, who opposed the building of the Barnwell reprocessing facility and the Clinch River Breeder program. However, the statutory requirement of U.S. consent rights over reprocessing in nuclear agreements began with the NNPA.
56. See Siddharth Varadarajan, "Safeguards for Breeder Reactors a Key Obstacle," *The Hindu*, January 21, 2006, <[www.globalresearch.ca/index.php?context=viewArticle&code=VAR20060121&articleid=1770](http://www.globalresearch.ca/index.php?context=viewArticle&code=VAR20060121&articleid=1770)>.
57. "This Is as Good a Text as One Can Possibly Get," Harish Khare and Siddharth Varadarajan, interview with Indian National Security Adviser M.K. Narayanan, *The Hindu*, July 28, 2007, <[www.thehindu.com/2007/07/28/stories/2007072855121300.htm](http://www.thehindu.com/2007/07/28/stories/2007072855121300.htm)>.
58. Mark Mazzetti and Neil A. Lewis, "U.S. Cites Indian Government Agencies in Weapons Conspiracy," *New York Times*, April 3, 2007, p. A7.
59. Letter to The Honorable Manmohan Singh from the Honorable Tom Lantos et al., Committee on Foreign Affairs, U.S. House of Representatives, May 2, 2007.
60. For example, see "India, Pakistan Renew Commitment to Iran Pipeline," Reuters, April 4, 2007, <[www.reuters.com/article/latestCrisis/idUSDEL141742](http://www.reuters.com/article/latestCrisis/idUSDEL141742)>.
61. See E. Pan, "India, China, and the United States: A Delicate Balance," Council on Foreign Relations Backgrounder Report, February 27, 2006. According to the *Indian Journal of Economics and Business*, India's trade with China grew from \$332 million in 1992 to \$13.6 billion in 2005.
62. Annual U.S. exports to India have more than doubled since 2003, and the United States is India's largest trading partner. See Indian Embassy website, <[www.indianembassy.org/newsite/indoustrade.asp](http://www.indianembassy.org/newsite/indoustrade.asp)>. In addition, more than 76,500 Indian students are attending U.S. universities, enlarging the base for increased future economic ties. See "IIE Backgrounder: Educational Exchange with India," November 13, 2006, <<http://opendoors.iienetwork.org/?p=25086>>, and Institute of International Education, "Educational Exchange with India for 2005/06," November 13, 2006, <[http://opendoors.iienetwork.org/file\\_depot/0-10000000/0-10000/3390/folder/56369/India+2006.doc](http://opendoors.iienetwork.org/file_depot/0-10000000/0-10000/3390/folder/56369/India+2006.doc)>.
63. See Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998).
64. On November 16, 1970, four years before the Pokhran explosion, the United States sent an *aide-memoire* to the Indian Atomic Energy Commission in Bombay stating that "the United States would consider it incompatible with existing United States-Indian agreements for American nuclear assistance to be employed in the development of peaceful nuclear explosive devices. Specifically,

for example, the use, for the development of peaceful nuclear explosive devices of plutonium produced therefrom, would be considered by the United States a contravention of the terms under which the American materials were made available." Declassified at the request of Senator Glenn by Louis V. Nosenzo on September 19, 1980, <[www.armscontrol.org/pdf/19701116\\_US\\_Aide\\_Memoire\\_Indian\\_AEC.pdf](http://www.armscontrol.org/pdf/19701116_US_Aide_Memoire_Indian_AEC.pdf)>.

65. Private communication with the author, June 15, 2006.
66. See Strobe Talbott, "Good Day for India, Bad for Nonproliferation," YaleGlobal Online, July 21, 2005, <[yaleglobal.yale.edu/display.article?id=6042](http://yaleglobal.yale.edu/display.article?id=6042)>.
67. Former Senator and Ambassador to India Daniel Patrick Moynihan (Democrat of New York) once said that India's willingness to sign the CTBT in exchange for recognition of its nuclear weapon status would be proof of its being a "responsible grown-up in these matters." Quoted in Talbott, *Engaging India*, p. 55.
68. For examples of India's support of U.S. initiatives that are mutually beneficial and are not the product of a nuclear relationship, see Ashley Tellis, "The U.S.-India 'Global Partnership': How Significant for American Interests?" testimony before the House Committee on International Relations, November 16, 2005, <[www.foreignaffairs.house.gov/archives/109/24598.pdf](http://www.foreignaffairs.house.gov/archives/109/24598.pdf)>.