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Indo – US
Civilian Nuclear Cooperation Agreement
Implications on South Asian Security Environment

Adil Sultan Muhammad

Visiting Fellow
Henry L. Stimson Center

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Indo-US Civilian Nuclear Agreement: Implications on South Asian Security Environment

Adil Sultan¹

Introduction

The Joint Statement of 18 July 2005 provided a roadmap for future strategic partnership between India and the United States. The new cooperative framework aimed at making India a global power has many facets including strategic, energy and economic components. However, the civilian nuclear cooperation agreement which is part of the overall energy dialogue attracted most attention due to its serious implications for global non-proliferation regime and on the South Asian security environment. The agreement would enable India to acquire civil nuclear technology from the US and other members of the Nuclear Suppliers Group (NSG), and accord India, de facto status of a *Nuclear Weapon State* (NWS).

The nuclear deal, if remain unchecked, could allow India to make qualitative and quantitative improvement in its nuclear arsenal, triggering a possible nuclear arms competition in the region, involving Pakistan, India and possibly China, thus destabilizing the entire region. Similarly, the overall India-US strategic partnership at the possible cost of regional instability could impinge security interests of other regional players; forcing smaller countries to re-evaluate their security imperatives and explore options such as strategic realignments, in order to better safeguard their security interests.

The emerging India-US relationship aimed at enhancing India's stature in the region, besides having possible negative implications for the South Asian stability does provide US with an opportunity to use its increased leverage with India, and work towards regional stability by helping to resolve outstanding disputes between India and Pakistan. The US could also work with these two non-NPT (Non Proliferation Treaty) NWS to

¹ The author is a Wing Commander of Pakistan Air Force working in Pakistan's Strategic Plans Division. However, the views expressed in the paper are those of the author himself and do not necessarily reflect or represent viewpoint of the Government of Pakistan, Pakistan Air Force, or the Strategic Plans Division.

bring them into mainstream non-proliferation regime through some kind of a regional arrangement, and under a treaty obligation, which could alleviate proliferation concerns of the international community, arising mainly due to non-NPT status of India and Pakistan. Such an option would bring the two non-NPT NWS under a treaty obligation, which could then become a basis for civil nuclear cooperation with other members of the NSG.

The Nuclear Deal

In the Joint Statement of July 2005, President Bush stated that as a responsible state with advanced nuclear technology, India should acquire same benefits and advantages as other such states. He also said that the US would work to achieve full civil nuclear energy cooperation with India as it realizes its goals of promoting nuclear power and achieving energy security. He would also seek an agreement from the Congress to adjust US laws and policies, and that the US will work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India. The Indian Prime Minister on his part conveyed that India would reciprocally agree that it would be ready to assume the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States.²

The intense and heated debate on the nuclear cooperation agreement remained mostly focused on the non-proliferation implications of the deal, with little or no attention on the regional implications of the nuclear agreement.³ The opponents of the proposed nuclear cooperation termed the agreement a ‘fatal error’ for global non-proliferation regime, and believe that this could have a domino effect as many nuclear have-nots will be more inclined to regard NPT as an anachronism, reconsider their self-restraint, and be tempted by the precedent that India has successfully established and that now, in effect, has an

² “Indo-US Joint Statement of 18 July 2005”, The Hindu, <www.hindu.com/thehindu/nic/indousjoint.htm>

³ See Stimson Center analysis of Indo-US Nuclear Initiative by Michael Krepon of Henry L. Stimson Center <www.stimson.org/home.cfm>

American blessing.⁴ This could have a negative effect on the behavior of several states including Brazil, South Africa and Ukraine, to name a few, that had given up their nuclear weapons program,⁵ with a hope that other countries would emulate and the international community could be led towards global nuclear disarmament. The supporters of the deal however, argue that the sale of nuclear technology would serve both countries' national security interest as well as the goals of non-proliferation.⁶ They also do not agree with the fact that the proposed nuclear deal is in any violation of Article 1 of the NPT, and have in fact termed the argument as a 'petty canard' – that is based on a novel legal interpretation of the US obligations that has never been accepted by the US government since the United States signed the treaty in 1968.⁷ However, Henry Sokolski like many others does not agree with this new and perverted interpretation of the NPT and commented; *“the violation is hardly a “petty canard”, it’s a real problem – one which, as the US and its allies plead their case against Iran and North Korea -- is only likely to become more of a headache. The US will be joining the ranks of North Korea and Iran as NPT violators.”*⁸

Is It About Energy?

The proponents of the India-US nuclear initiative argue that the deal is *“an effort to strengthen India’s ability to expand its civilian nuclear energy’s contribution to India’s large and rapidly growing electricity needs, rather than a closet ‘atoms for war’ effort that would have the effect of covertly accelerating the growth in India’s nuclear arsenal.”*⁹ Similar argument was given by Secretary Rice in her testimony before the Senate Foreign Relations Committee, once she said; *“Civil nuclear cooperation agreement with India will help meet its rising energy needs without increasing its reliance on unstable foreign sources of oil and gas, such as nearby Iran”*.¹⁰

4 Strobe Talbot, “Good day for India, Bad for Nonproliferation”, Yale Global, 21 July 2005. <<http://yaleglobal.yale.edu/article.id=6042>>, p.4.

5 Lt Gen (Retd) Talat Masood, Dawn, April 4, 2006. <www.dawn.com.pk/2006/04/04/ed.htm>

6 Ashley Tellis, “Should the US Sell Nuclear Technology to India? – Part II”, 10 November 2005. <http://yaleglobal.yale.edu/article.id=6487>.

7 Ashley Tellis, “Atoms for War?” Carnegie Endowment for International Peace, June 2006. p.9.

8 Henry Sokolski, “Unconditionally Bad”, June 26, 2006. <<http://article.nationalreview.com/?q>>

9 Tellis, Atoms for War? Op cit. p.7.

10 Remarks of Secretary of State Condoleezza Rice at the Senate Foreign Relations Committee on the US-India Civil Nuclear Cooperation Initiative, Wednesday, April 5, 2006. p.6-7.

India's utilizes 11% of various available energy sources including oil, gas, coal, wind and nuclear power for producing electricity. Out of this only 2-3% is produced through nuclear power. The civil nuclear cooperation agreement, once materialized in its true essence by 2025 could increase this production to a maximum of 6.5 - 8% only. Therefore it is not clear how this increase of 4.5 - 6% in nuclear electricity could make any substantial difference in global climatic conditions or in the Indian economy. Tall claims asserting India's need to harness nuclear technology for satiating its energy requirements have been appearing since late fifties when India went about seeking foreign assistance to establish its nuclear infrastructure. In 1962, Homi Bhabha, the founder of India's nuclear program, claimed that by 1987 nuclear energy would constitute 20,000-25,000 megawatts of installed electricity-generation capacity. His successor as head of the Department of Atomic Energy, Vikram Sarabhai, predicted that by 2000 there would be 43,500 megawatts of nuclear power. Neither of these predictions came true. The cold hard fact remains that India's current nuclear power generation capability stands at around 3,300 megawatts, which constitutes barely 3 percent of India's installed electricity capacity. (Wind energy, in comparison produces 4% of the Indian electricity). Indian establishment has now laid down ambitious benchmarks to generate 10,000 MWs by 2010, 20,000 MWs by 2020 and 150,000 MWs by 2050 – projections that appear surreal given India's past record and her infrastructural capability to absorb such energy production into her existing distribution system. Therefore it is more likely that India will continue to divert nuclear expertise and materials, provided for producing 'cheap, efficient and clean' energy, towards accelerating her ambitious nuclear weapons' program.¹¹ Edward J Markey, while testifying before the House International Relations Committee said; *"In 2005, only 1% of India's installed electrical capacity was fuelled by oil and only 2.7% by nuclear power....Throughout the next century, Coal will continue to be the major player in India's electricity sector. India plans to build additional 213 coal plants by 2012. These plants will produce the bulk of India's electricity. A realistic, safe, and practical plan for partnership between the United States and India would be a*

¹¹ Momin Iftikhar, "India's Civilian Nuclear Energy Program – Hype or Reality?", South Asia Research and Analysis Studies, June 12, 2006.

<www.saras.org.pk/viewarticle.php?topicid=149.

*Clean-coal cooperative, not a nuclear one,*¹² and an aggressive plan by India of improved energy efficiency could substitute for all the future power output from nuclear reactors currently being planned in India between now and 2020.¹³

Major Issues

In order to achieve the objectives of the July 18 Joint Statement, both countries initially wrangled on the issue of sequencing of steps that attracted significant public attention. After submission of the separation plan, the US administration started convincing members of the Nuclear Supplier's Group (NSG) to make India specific exceptions, which could allow India to acquire advanced nuclear technology from these countries. India is now in the process of negotiating safeguard agreements and an Additional Protocol for its designated civilian nuclear facilities with the International Atomic Energy Agency (IAEA). The two other controversial issues that still needs to be negotiated, which would make India's intentions more obvious are; India's position on Comprehensive Test Ban Treaty (CTBT) and the Fissile Material Cutoff Treaty (FMCT).

Separation of Civilian/ Military Facilities

Before the March 2, agreement, the US wanted India to put 'great majority' of its 22 nuclear reactors on the civilian list. Presuming the 'great majority' means three quarters of the total number of reactors, it would have meant that India should have declared as many as 17 reactors, including the six already under IAEA safeguards, as civilian.¹⁴ Additionally, US asked India to place its current and future *Fast Breeder Reactors* (FBR's) under safeguards, which India claims to be an indigenous test program, still in its infancy, and cannot be declared as civilian. India hopes to use the FBR for future energy needs that sought to bridge the gap between the shortage of natural uranium that India faces and the vast thorium reserves it has.¹⁵ Another factor that could have contributed to

¹² Edward J Markey, Prepared Testimony before House International Relations Committee on India Nuclear Deal, May 11, 2006.

¹³ Ibid.

¹⁴ V. Sudarshan, "Be Civil Please", Outlook, February 2006, p.34.

¹⁵ Ibid, p.35.

India's refusal to place FBR's under safeguards is that U-333, - a by-product of fission in FBRs, is a suitable fuel for India's nuclear powered submarine that is being developed under R&D program euphemistically called the ATV project. By putting FBR's under safeguards, Indian scientists feared that their indigenous research would be exposed through external inspections and India's intellectual property rights over this new technology may be diluted if inspectors monitor every stage of their ongoing research.¹⁶ Nuclear experts familiar with the origin of the FBR technology disagree with the Indian claim of ingenuity as the technology has its roots in France.

Some in India viewed US insistence to bring maximum number of nuclear facilities including the FBR's under safeguards an attempt to cap India's fissile material production. It was therefore strongly resisted by the Indian nuclear bureaucracy including head of India's Atomic Energy Commission Dr Anil Kakodkar. Prime Minister Singh also came out openly in support of his scientists and declared; "we have made it clear that we cannot accept safeguards on our indigenous fast breeder program," and added; "we have taken into account our current and future strategic needs and programs after careful deliberation of all relevant factors, consistent with our nuclear doctrine...there has been no erosion of the integrity of our nuclear doctrine, either in terms of current or future capabilities...it will be the autonomous Indian decision as to what is 'civilian' and what is 'military'. Nobody will tell us what is 'civilian' and what is 'military'... the number of thermal nuclear reactors that India would agree to put under civilian list would be equal to 65% of the total installed thermal nuclear power capacity."¹⁷ Gary Milhollin in his testimony to the Senate Foreign Relations Committee commented on the Indian offer and said; "In effect, India's offer is like that of a counterfeiter with a 22 room house, who offers to let the police look into 14 rooms as long as they stay out of all the others.... Everyone knows that it will be the eight undeclared ones that make the bomb"¹⁸ India also managed to keep the FBR's out of the civilian list, yet another major concession to

16 Gen. (Retd) V P Malik & Brig (Retd) Gurmeet Kanwal, "Indo-US N-Deal: Overcoming the Last Hurdle", Observer Research Foundation Analysis, March 2, 2006.

17 Prime Minister Singh's Statement on Civil Nuclear Energy Cooperation with the United States in Parliament, February 27, 2006.
<www.hindu.com/thehindu/nc/suomotuu.htm>

18 Gary Milhollin, Testimony on "US - India Atomic Energy Cooperation" hearing for Senate Committee on Foreign Relations, April 26, 2006.

India which prompted George Perkovich to comment; “this is Santa Claus negotiating. The goal seems to give away as much possible.”¹⁹

Type of Safeguards

The Joint Statement of 18 July refers to India “taking a decision to place *voluntarily* its civilian nuclear facilities under IAEA safeguards.”²⁰ An unlikely voluntary arrangement on the pattern of five NWS could have enabled India to offer more number of facilities for safeguards and withdraw these whenever required citing national security interest. Such a provision if agreed, could have essentially placed India squarely in the company of NWS.²¹ It was however, outrightly rejected by the Administration as well as the Congress. Under Secretary of State for Arms Control and International Security Affairs, Robert Joseph, while testifying before the Senate Foreign Relations Committee said; “*US would not view a voluntary offer arrangement as defensible, and the safeguards must be applied in perpetuity.*”²² Similarly, Chairman Senate Foreign Relations Committee, Senator Richard Lugar had made it clear at the very onset of the nuclear debate that the Committee will judge the efficacy of the separation plan in terms of three key criteria. He identified these as “safeguards, non-assistance and transparency.”²³

There are currently three types of safeguards agreements in vogue, INFCIRC²⁴/66, INFCIRC/153, and Voluntary Safeguards Agreements. It is not yet clear what will be the final outcome of the on going negotiations between India and the IAEA. India could ask for a facility specific safeguards on the pattern of INFCIRC/66 agreements on its designated civilian facilities individually or collectively for all of its civilian facilities in the agreed separation plan. These would then be ‘in perpetuity’ and would thus preclude

¹⁹ Steven R. Weisman, “Dissenting on Atomic Deal”, The New York Times, March 3, 2006.

²⁰ “Indo-US Joint Statement”, July 18, 2005, The Hindu.

²¹ Sharon Squassoni, “US Nuclear Cooperation with India: Issues for Congress”, CRS Report, 24 October 2005.

²² Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 Senate Foreign Relations Committee India Hearing.

²³ Seema Mustafa, “Nuke Plan Not Given to Cabinet, Sent to US”, The Asian Age, January 7, 2006.

²⁴ INFCIRC, an abbreviation of “Information Circular,” is a designation the IAEA uses to record its agreements with states and organizations. INFCIRC/66 and INFCIRC/153 are model agreements; the actual agreements with states will bear different numbers. INFCIRC/66 agreements predate the NPT and were used in bilateral safeguards arrangements, whereas INFCIRC/153 agreements are “full-scope safeguards” under the NPT.

future use of any of these designated civilian facilities for the production of nuclear material for nuclear explosive purposes, and would also eliminate possibility of withdrawing any of these facilities from safeguards for national security purposes.²⁵

The other type of safeguards INFCIRC/153, which is also known as comprehensive safeguards agreement, is essentially for non-nuclear weapon states (NNWS). The existence of a weapons oriented component in the Indian nuclear program automatically rules out possibility of a comprehensive safeguards arrangement under INFCIRC/153,²⁶ as technically India and Pakistan both do not fall into the category of NNWS.

During the on going discussion on the type of safeguards with the IAEA, India would continue to push for a favorable arrangement, which could help in an implicit recognition of India as a NWS. As PM Singh in his address to the Indian parliament had earlier stated; “United States [has] implicitly acknowledged the existence of our nuclear weapons program...as a responsible State with advanced nuclear technologies, India should acquire the same benefits and advantages as other States which have advanced nuclear technology, such as the United States.”²⁷ An Indian Embassy backgrounder on the agreement also noted that the “NWS including the US, have the right to shift facilities from civilian category to military and there is no reason why this should not apply to India.”²⁸

Nuclear Suppliers Group

The Nuclear Suppliers Group (NSG) was created as a result of India’s nuclear explosion of 1974, which formulated rules to preclude the possibility of any future misuse of nuclear technology provided to a country for peaceful purposes. It is a group of 45 countries, aimed at regulating nuclear trade within the group and with other countries, who are signatories to the NPT. India is not an NSG member, neither a NWS, nor a signatory to the NPT, therefore it is ineligible for nuclear trade with other countries, as

²⁵ Fred McGoldrick, etal., “The US – India Nuclear Deal: Taking Stock”, Arms Control Today, October 2005, p.2. <www.armscontrol.org/act/2005_10/OCT-Cover.asp>.

²⁶ C. Raja Mohan, “N-Deal: Now Focus on IAEA Safeguards”, Indian Express, 25 December 2005, p.2.

²⁷ Ibid.

²⁸ Ashley Tellis, “India as a New Global Power: An Action Agenda for the United States”, Carnegie Endowment for International Peace, 2005, p.25.

long as NSG amends its rules or makes India specific exceptions through a consensus decision. In order to convince members of the NSG to allow nuclear trade with India, US has already initiated consultations with the group.²⁹ The Administration hopes that it would be able to convince the NSG to make India specific exception that would allow full cooperation with India without abandoning NSG consensus rules or the full-scope safeguards condition of supply.³⁰ Initial responses from some of the major nuclear suppliers including UK, France and Russia have all been positive. Whereas, member countries such as Sweden, Denmark, Austria, and Ireland have indicated their reservations on the basis of their non-proliferation policies.³¹

Taking a lead from Indo-US nuclear cooperation agreement, France was quick to sign its own variant of the deal with India,³² and Russia, not wanting to be left behind, has already supplied nuclear fuel for India's nuclear reactors at Tarapur. China has so far been cautious in its approach towards the nuclear cooperation agreement and has called for abiding by the rules of the global non-proliferation regime.³³

Fissile Material Cut Off Treaty (FMCT)

In his recent paper, 'Atoms for War?', Ashley Tellis writes that following nuclear tests of 1998, India decided to increase its fissile material production for two reasons; first, to provide Indian policy makers with an option of deploying a larger nuclear arsenal than originally intended; and second, as insurance in case a global fissile material cutoff regime, which could require India to immediately terminate the production of weapons grade fissile materials, were to *unexpectedly* materialize, and for this purpose the idea of using India's power reactors in a 'low burn-up' mode to increase the production of weapons grade plutonium and possibly produce tritium was also explored.³⁴

29 "NSG Begins Mulling Response to US-India Cooperation Deal," Nuclear Fuel, Sept. 26, 2005.

30 Sept 8, 2005 HIRC US-India Hearing, Nov 2, 2005 SFRC US-India Hearing, in, "US Nuclear Cooperation With India: Issues for Congress", CRS Report, updated January 12, 2006. p.19.

31 Mark Hibbs, "US to Face Some Opposition if it Seeks Consensus NSG Rule on India," Nucleonics Week, Sept. 29, 2005, in, "US Nuclear Cooperation With India: Issues for Congress", CRS Report, updated January 12, 2006. p.19.

32 "Paris Ready to Sell reactors", Deccan Chronicle, 31 January 2006. <www.deccan.com/home/homedetails.asp>

33 "Hurdles Ahead for Landmark Nuclear Deal", BBC NEWS, 3/3/06. <www.bbc.co.uk>

34 Tellis, Op cit. p.13.

India's continued reluctance to declare a moratorium and its insistence on a multilateral verifiable FMCT seems to be an attempt to exploit this extended window of opportunity as long as the major parties do not resolve their differences and a consensus is reached at the CD. Unless the FMCT is negotiated, India is under no obligation to halt production of fissile material. "In one important respect, India has received more leniency than the five established nuclear "haves" have asked for themselves: The US, Britain, France, Russia, and China say they have halted the production of the fissile material that goes into nuclear bombs, while India has only promised to join universal ban that would include Pakistan, if such a thing ever materializes".³⁵

The US Administration does not seem interested in demanding a moratorium on fissile material production from India as is apparent from Under Secretary Robert Joseph's testimony to the House International Relations Committee hearing in which he stated; "[US remains] committed to achieving Indian curtailment of fissile material production and we have strongly encouraged a move in this direction. ... but we will not insist on it for purposes of this civil nuclear initiative."³⁶ Indian officials on the other hand, have repeatedly asserted that; "there is no commitment at all to cease production of fissile material ahead of conclusion of [such a] multilateral FMCT."³⁷ Some of the Washington based Indian experts suggest that India should not cap its nuclear weapons program, and restraining India's ability to build up its nuclear stockpile could "threaten to place New Delhi at a disadvantage vis-à-vis Beijing, a situation that could not only undermine Indian security but also US interests in Asia."³⁸ Ashley Tellis, while testifying before House International Relations Committee stated; "Congress should not support any amendments that are intended to limit, or have as their effect a limitation on, India's capacity to produce fissile materials for its nuclear weapons program....Accordingly, any effort to stipulate that an Indian fissile materials production moratorium would be a precondition for implementing the deal in effect functions as a 'poison pill' that would sunder the

35 Strobe Talbot, *Opeit*.

36 House International Relations Committee Hearing.

37 "Backgrounder on India-US Nuclear Energy Cooperation," July 29, 2005.

38 Tellis, *Opeit*. p.25.

accord.”³⁹ The Indian leadership, while ruling out any such probability asserted that; “there will be no capping of our strategic program, and the separation plan ensures adequacy of fissile material and other inputs to meet the current and future requirements of our strategic program, based on our assessment of the threat scenarios. No constraint has been placed on our right to construct new facilities for strategic purposes.”⁴⁰ Michael Krepon, a leading critic of the agreement quipped: “it’s a sweetheart deal for India... The Administration told Congress that the agreement would be about the growth of India’s electricity and not the growth of Indian bomb making potential and that standard clearly has not been met.”⁴¹

Implications on South Asian Security Environment

The Indo-US civil nuclear cooperation agreement if implemented without checking India’s potential to increase its fissile stocks and eliminating any possibility by India of improving its nuclear weapons could lead to arms competition in the region involving Pakistan, India and China, thus destabilizing the entire region. US objective of making India global or at least a regional military power to achieve its own perceived interests could also impinge upon security interests of other countries. It could force major stakeholders to re-evaluate their security interests in the face of emerging Indo-US strategic partnership thus triggering transformation of regional alliance structures, where India is seen decisively shifting towards the United States and Pakistan being compelled to explore options that could best serve its security interests independent of the United States.

Regional Instability

The nuclear cooperation agreement once implemented would enable India to make quantitative and qualitative improvement in its nuclear arsenal. The assurance for

39 Ashley Tellis, “The US-India ‘Global Partnership’: Legislative Options”, Prepared Testimony to the House Committee on International Relations, May 11, 2006, p.5.

40 Prime Minister’s Statement on Implementation of India’s Separation Plan, March 07, 2006 New Delhi. <www.hindu.com/thehindu/nic/pmspeech.htm>

41 “US Critics Slam Indo-US Deal”, Indian Express, March 3, 2006. <www.expresindia.com>

perpetual nuclear fuel supply from the US would free India's indigenous uranium reserves to be exclusively used for making more number of nuclear weapons. India has agreed to allow monitoring of 14 nuclear reactors to ensure nuclear fuel at these sites is not used for weapons, eight other reactors and an unlimited number of future reactors would continue to produce fissile material for producing NWS, free of any international controls. It was reasserted by PM Singh during his address to the Indian Parliament on March 7, once he said; "there will be no capping of our strategic program, and the separation plan ensures adequacy of fissile material and other inputs to meet the current and future requirements of our strategic program, based on our assessment of the threat scenarios. No constraint has been placed on our right to construct new facilities for strategic purposes."⁴² The March 2, separation plan would allow India to increase its production from the estimated 6 to 10 additional nuclear bombs per year to several dozen per year. India today has enough separated plutonium for 75 to 110 nuclear weapons.⁴³ A former senior Indian intelligence official reaffirmed this once he said; "*the assurance of nuclear fuel supply from the US and the NSG would free India's existing capacity to produce highly enriched uranium and plutonium for its nuclear weapons program...Under the deal, India shall.... have the capability to produce 50 warheads a year.*"⁴⁴

The US Administration officials and the proponents of the deal, however, do not agree with this assertion and argue that India is self sufficient in uranium reserves and if India wanted to increase its fissile stocks, it could have done so - with or without the nuclear deal. According to Mr Tellis, "*India has sufficient reserves to sustain the largest nuclear weapons program that can be envisaged...possesses enough uranium to sustain more than three times its current and planned capacity as far as nuclear power production is concerned...this basic reality will not be altered whether Bush-Singh nuclear cooperation initiative now being reviewed by the US Congress is successfully consummated or not.*"⁴⁵ He has also termed the proliferation concern that *US supplied fuel would free up India's*

42 "Prime Minister's Suo Motu Statement on Discussions on Civil Nuclear Energy Cooperation with the US: Implementation of India's Separation Plan", March 7, 2006, The Hindu. <www.thehindu.com/thehindu/nic/pmspeech.htm>

43 Joseph Cirincione, "Nuclear Cave In", CEIP, March 02, 2006

44 "India Can Make 50 Nuclear Warheads A Year", The Hindu, June 19, 2006. <www.thehindu.com/2006/06/19/stories/2006061904331200.htm>

45 Tellis, Op cit p.7.

*indigenous reserves purely for producing nuclear weapons, as a fungibility thesis, as India possesses requisite uranium reserves to build as many weapons as it might realistically desire.*⁴⁶

Contrary to what the Administration officials and the proponents of the deal argue, the 2005-06 report by India's Department of Atomic Energy (DAE) on its official website, states; "we [India] *have rather meager reserves of uranium.... On the other hand, the energy demands are fast growing. With our modest uranium reserves...*"⁴⁷ India's national magazine 'Frontline' in its last Dec-Jan issue also acknowledged the fact that India's nuclear program is heading for a crisis, due to *uranium shortage* in the country.⁴⁸ Gen (Retd) V P Malik, India's former Army Chief writes; "*Those who are of the view that India has enough fissile material tend to include the 1,000 tons of reactor grade Plutonium that India has obtained as a by-product from its nuclear power reactors. According to many scientists, this Plutonium is not suitable for nuclear warheads as it is of low quality. It does not produce consistently predictable fission and is relatively more prone to accidents.*"⁴⁹ Henry Sokolski, a leading nuclear expert wrote; "*India currently produces 300 tons of uranium annually – just enough to run its current fleet of heavy water power reactors. The additional 150 tons it needs annually to fuel its military facilities is being drawn from a pre-existing stockpile that's due to peter out in next 12 months.*"⁵⁰

India's insistence on keeping large part of its nuclear facilities outside the inspection regime, insistence on US assurances for perpetual fuel supplies for civilian facilities even if it violates part of the agreement, and India's reluctance to declare unilateral moratorium on fissile material production clearly indicate India's intention of increasing its nuclear weapons stockpile. This could make other nuclear weapons states in the region uncomfortable. As Senator Sam Nunn wrote in his article; "there is every reason to

46 Ibid. p.9.

47 "Shaping the Third Stage of India Nuclear Power Plant", Department of Energy, Government of India. p.1-2. <www.dae.gov.in/publ/3rdstage.pdf>

48 "Nuclear Power: Uranium Crisis", Frontline, Volume 22, Issue 27, Dec 31- Jan 13, 2006. p.1. <www.flonnet.com/f12227/stories/>

49 Gen. (Retd) V P Malik & Brig. (Retd) Gurmeet Kanwal, "Indo-US N-Deal: Overcoming The Last Hurdle", Observer Research Foundation India. p.2. <www.observerindia.com/analysis/A576.htm>

50 Henry Sokolski, "Unconditionally Bad", June 26, 2006. <<http://article.nationalreview.com/?q>>

suspect that Pakistan and China will react to this deal by ratcheting up their own suspicions and nuclear activities – including making additional weapons material and weapons.”⁵¹

The nuclear cooperation agreement could also help India to make qualitative improvement in its nuclear weapons program. As one of the supporter of the nuclear deal agree that; *“access to new reactor technology from abroad promises to give India’s nuclear engineers exposure to new advanced designs that maximize efficiency, output, and safety and which could in principle be applicable to future designs developed by India’s own indigenous nuclear industry overtime.”*⁵² This could lead to intangible proliferation of nuclear technology. Indian scientists would be given access to advanced technologies, which could then be misused for making qualitative improvement in nuclear warheads and their delivery systems. India has a past record in which it received nuclear and space technology for peaceful purposes but misused it for making NWs and their delivery systems. As Gary Milhollin in his testimony stated: *“India, in fact, is the first country to develop long range nuclear missile from a civilian space program. India’s Agni missile tested in 1989, was built by using the design of the American ‘Scout’ space rocket. India imported the blue prints from NASA under the cover of peaceful space cooperation.”*⁵³ Some of the nuclear experts believe that if India indeed decides to make qualitative improvement in its nuclear arsenal, it would require testing of the new designs. As part of nuclear cooperation agreement, India has made no binding commitment that prohibits nuclear testing. On the contrary a pledge to supply nuclear fuel in perpetuity, even if the agreement is revoked because of some reason, provides an option to India to test new designs in the future if it needs validation. India’s continued resistance to sign CTBT indicates that India would like to keep the option of nuclear testing open, and would not succumb to US pressures as part of the new nuclear order.

51 Sam Nunn, “Nuclear Pig in a Poke”, May 24, 2006, The Wall Street Journal. <http://online.wsj.com/article_print/SB114843258760661354.html>

52 Tellis, “Atoms for War?” Op Cit . p.51

53 Gary Milhollin, Testimony before Committee on Foreign Relations, April 26, 2006. p.7.

Regional Realignments

Pakistan always had an Indo-specific linear threat perception. This simplistic linearity which identifies security and national interest mainly as response to an external threat, which in turn is viewed mostly as Indo-specific, influences the strategic thinking within Pakistan.⁵⁴ Pakistan's linear approach towards India stems from the outstanding territorial disputes and from the fact that both India and Pakistan have fought number of wars and experienced a series of crises. The first military conflict in 1948 between the two countries exposed Pakistan's military fragility and activated Indian threat to its territorial integrity.

India's military superiority as a result of uneven distribution of military resources at the time of partition, forced Pakistan's security planners to look towards extra regional powers. In the 1950's, intensifying US-Soviet rivalry provided Pakistan with the leverage it needed to pursue its *inclusionary* doctrine of involving outside powers in the region to safeguard its own security interests. Pakistan quickly linked itself with US strategic planning in the Mutual Defense Assistance Agreement (1954), the Southeast Asia Treaty Organization (1954), and then the Baghdad Pact (1955- later the Central Treaty Organization), and a bilateral Agreement of Cooperation (1959).⁵⁵ According to 1959 executive agreement; "United States would regard, preservation of Pakistan's independence and integrity as vital to its own national interest and to the World peace, and in case of aggression against Pakistan, the US would *take such appropriate action, including the use of armed force, as may be mutually agreed upon.*"⁵⁶

Pakistan's inclusionary doctrine, aimed at involving one of the two super powers during the Cold War enabled it to safeguard its security interests in the region, but in return had to pay heavy price of playing a frontline role in the decade long Afghan war and in the ongoing war against terrorism. Acknowledging Pakistan's crucial role in safeguarding

54 Dr. Ayesha Siddiq Agha, "Pakistan's Security: Problems of Linearity", South Asian Journal, October-December, 2004, No.6. <<http://www.southasianmedia.net>>.

See also Ayesha Siddiq Agha, "Pakistan's Arms Procurement and Military Build up, 1979-99: In Search of a Policy", (Lahore: Sang-e-Meel Publications, 2003).

55 Devin T. Hagerty, "The Development of American Defense Policy Toward Pakistan, 1947-1954", Fletcher Forum, Vol. 10, No. 2 (Summer 1986), pp. 217-242.

56 "Agreement of Cooperation Between the Government of the United States of America and the Government of Pakistan", United States Treaties and Other International Agreements, Vol. 10, Part 1, 1959 (Washington, D.C.: U.S. Department of State, 1960), pp. 317-319.

US interests in the region, Gary Milhollin in his testimony stated; “under any calculation of America’s strategic relations, Pakistan ranks higher than India. Pakistan is essential to our ongoing military and political efforts in Afghanistan. Pakistan is also essential to our campaign against Al Qaeda...Pakistan is also a leading power in Muslim world; a world with which United States needs better relations...In any competition for strategic favor from the United States, India finishes a distant third [Israel being the second most important country]”.⁵⁷

Pakistan’s commitment to help US achieve its objectives in the region at the perils of its own security was based on the premise that in return US would ensure safeguarding Pakistan’s security interests in the region. The Indo-US strategic cooperation aimed at making India a global military power while according a symbolic status of a major non-Nato ally refutes any such presumption by Pakistan. This could impact strategic thinking within Pakistan thus forcing it to re-evaluate its strategic priorities and work on the contingencies in which US and India would be close military and political partners against future potential adversaries. Other regional powers including China and Russia are also conscious of the changing strategic environment. Nato’s incursions in the Eurasian heartland, India’s growing interest in the Central Asian energy reserves are some of the factors that could ultimately trigger transformation of regional security alliance. In this backdrop recently concluded meeting of the Shanghai Cooperation Organization (SCO) at Beijing drew unprecedented response from the member countries. India’s decision to maintain a distance from the SCO was another interesting development that could be interpreted as ‘crystalization’ of future alliances’ structure in the region. The primary objective of the SCO is to enhance economic cooperation amongst the member countries on the pattern of ASEAN (Association of South East Asian Nations). However, it does not restrict member countries to enter into a security alliance in future, if their common interests are threatened by other regional aspirants with or without external assistance.

⁵⁷ Milhollin, *Opcit.* p.4.

Pakistan, in the last few years has been trying to alter its country centric approach and has adopted a more pragmatic foreign policy, involving reorientation of its relations with its regional neighbors including Russia. In a recent interview to Russian news agency Itar-Tass, President Musharraf highlighted Russia's significance in the region and said; "Moscow enjoyed influence in Central Asia, a region with which Pakistan had historical and cultural bonds....There is a mutuality of interest in this region between Russia and Pakistan. He referred to the Shanghai Cooperation Organization (SCO), a grouping of Russia, China and Central Asian countries....[where] Pakistan is looking forward to getting full SCO membership, and on Pak-Russian defense cooperation, the President added that Pakistan was interested in purchases from Russia and advocated that this area should also not have an Indo-centric approach."⁵⁸

While it may be premature to assume that SCO or some other security arrangement could emerge as a counter balance to the Indo-US strategic partnership in the near future and Pakistan would in fact be able to de-link itself from the US. However, Pakistan's primary security objective has always been to ensure Pakistan's territorial integrity against an existential threat from its large eastern neighbor. If this threat is compounded because of the Indo-US strategic partnership and becomes difficult to manage, Pakistan could be compelled to exercise all available options including a possible strategic alliance with other big powers such as Russia and China.

Pakistan's Likely Response

Pakistan has so far adopted a cautious approach and seems not to be in a panic mode. It will most likely follow the policy of 'wait and see' before making adjustments in its minimum deterrent posture. Some of the factors that could affect Pakistan's strategic thinking are; first, the final outcome of the deal, how would it shape India's NWs potential. Second; the likely conventional imbalance as a result of 2005 Indo-US Defense Cooperation Agreement, and finally; the future of India-Pakistan peace process.

⁵⁸ "Ties with Russia must not be Indo-centric: Musharraf sees mutuality of interest", DAWN, June 08, 2006. <www.DAWN.com>

If India-US civil nuclear deal facilitates qualitative and/ or quantitative improvement in India's nuclear weapons capability, Pakistan would take definite remedial measures to ensure credibility of its minimum nuclear deterrent. While describing Pakistan's nuclear policy, President Musharraf earlier stated; *“Pakistan pursues the strategy of credible deterrence in both conventional and unconventional fields in accordance with the threat it may perceive. Pakistan, he said, has quantified the strategy of minimum defensive deterrence and is refining its deterrence level of force...whenever an imbalance is created in the region; Pakistan has to balance it out in accordance with its strategy of minimum deterrence.”*⁵⁹ While reacting specifically to the nuclear deal, Pakistan's National Command Authority (NCA), an apex strategic decision making body expressed satisfaction at the current state of Pakistan's strategic deterrence, noting that the strategic capability was sufficient to meet current and future challenges. However, it noted with concern the implications of India-US nuclear deal on strategic stability in South Asia...the NCA expressed firm resolve that a credible minimum deterrence requirement will be met.⁶⁰

The second factor that could impact Pakistan's strategic thinking is the growing conventional imbalance between India and Pakistan. The Indo-US Defense Agreement of 2005, once implemented, would enable India to acquire state-of-art advanced fighter jets with possible transfer of technology besides other high tech conventional military equipment. The resultant conventional military imbalance could force Pakistan to either increase its defense expenditures in order to maintain rough conventional parity between the two countries, or increase its reliance on nuclear deterrent, which could lead to nuclear instability in the region. Another significant component of India-US growing defense cooperation is the US offer of Ballistic Missile Defense (BMD) System to India. Despite futility of such a system in the India-Pakistan context, mainly due to geographical congruity and very little reaction time, deployment of BMD could only force Pakistan to re-evaluate its minimum deterrent posture.

⁵⁹ Addressing Foreign Correspondents Association of Philippines, News Summary Associated Press Pakistan, April 21, 2005.

⁶⁰ Dawn April 13, 2006. <www.dawn.com.pk/2006/04/13/top5.htm>

The third factor that could affect strategic thinking on both sides is the future of on going India-Pakistan peace process. Despite repeated assertions by both sides that the peace process is “*irreversible*”, there has been no forward movement on the core issues. Unless the major disputes are not addressed, the nuclear equation between the two adversaries cannot be de-hyphenated.

China Factor

China is an important part of the South Asian regional security complex.⁶¹ Importance of China in the Indian strategic calculus provides an ostensible reason for India to acquire nuclear weapons.⁶² China factor also helps diverting possible western cynicism on India’s huge military expenditure that is primarily aimed at enhancing India’s military stature rather than stemming from any genuine security concern and this was also reflected in PM Vajpae’s statement soon after the 1998 nuclear tests, once he said; “India had become the sixth nuclear weapon state and should be treated as such by the other five.”⁶³ The official justification however, was that the regional security environment had deteriorated because of Pakistan and China’s increasing military cooperation. I.K. Gujral, India’s former Prime Minister refuted this claim and in fact blamed the BJP government for pushing the country into nuclear arms race for purely political reasons as according to him “there was no [external] security threat when he left the office of the Prime Minister”.⁶⁴ Some of the Indian security analysts however seem obsessed with the Chinese military threat in an effort to project India as an equivalent or a potential military adversary to China. They believe that India should – “create precisely the kind of dilemmas for China that Beijing has created for it... by arming Vietnam with strategic weapons, establishing a naval presence in Cam Ranh Bay and elsewhere in South East Asia, to match China’s ensconded military positions in Myanmar as also in Gawadar in Pakistan’s Makran Coast, cooperating with Taiwan in the nuclear and missile fields, and

61 The term has been more elaborately explained by Barry Buzan and Ole Weaver in their book “Regions and Powers: The Structure of International Security”, (London: Cambridge University Press, 2003).

62 Abraham, *Opcit.* p.2.

63 Kamal Matinuddin, “The Nuclearization of South Asia”, (Karachi: Oxford, 2002), p. 124

64 Outlook, New Delhi, 8 June 1998, p.8

coordinating its activities in Washington with those of Taiwan lobby.”⁶⁵ The exploitation of Chinese military threat helps India to create an illusion in the west especially in the US that if helped in its pursuit of becoming a great regional/ global power, India could in fact become a counter weight to China. Such an assumption is a self serving piffle. According to Gary Milhollin, “India-as-counterweight-to-China theory reminds one of the argument made by the first Bush administration in the 1980’s, when it contended that the United States should export sensitive dual use equipment to Saddam Hussein in order to build up Iraq as counterweight to Iran. US pilots were later killed in Iraq trying to bomb things that US companies had provided.”⁶⁶

A brief analysis of Indo-China capabilities would rule out any possibility of India becoming a potential challenger to China’s military capability in the foreseeable future, and before making such an assumption it would be prudent to answer some of the questions; First, what is the time period required to develop India’s military capability vis-à-vis China, and what would be China’s military potential by that time? Second, why would India increase its neighborhood troubles that are already unmanageable by confronting militarily? And finally, why should India play a protector of US interests in the region at the cost of its own security and economic growth? Ashley Tellis while asserting India’s independent foreign policy objectives, in his testimony to the Senate Foreign Relations Committee said; “a strengthened bilateral relationship does not imply that India will become a treaty bound ally of the United States at some time in the future. It also does not imply that India will become a meek, compliant and uncritical collaborator of the United States in all its global endeavors. Rather India’s large size, its *proud* history, and its great ambitions, ensure that it will always pursue its own interests – just like any other great power.”⁶⁷

65 See Introduction, Bharat Karnad, “Nuclear Weapons and Indian Security: The Realist Foundations of Strategy,” (MacMilan India Limited: New Delhi), p.xiii.

66 Gary Milhollin, Director Wisconsin Project on Nuclear Arms Control and Professor Emeritus, University of Wisconsin Law School, testifying before the Committee on Foreign Relations United States Senate, April 26, 2006, p.5.

67 Ashley Tellis, “US-India Atomic Energy Cooperation: Strategic and Nonproliferation Implications”, Prepared Testimony to the Senate Foreign Relations Committee, April 26, 2006, p.7.

Way Forward

The nuclear cooperation agreement requires United States to amend its own domestic laws that were formulated as a result of India's misuse of civil nuclear technology and exploding a nuclear device in 1974. US has also taken upon it to convince members of the nuclear suppliers group (NSG) for making India-specific exceptions, to benefit India from civil nuclear technology. Such preferential treatment for a singular country aimed at building strategic partnership does provide opportunity for the US to demand a degree of reciprocity and responsibility by India. If the agreement is not aimed at enhancing India's NWs capability then US must insist on some tangible commitments that could restrict India from making any qualitative and quantitative improvements in its nuclear arsenal. US also needs to explore options that could bring India and Pakistan under non-proliferation obligations in order to exclude any future possibility of proliferation of nuclear technology from these two NPT outliers to the NNWS and at the same time enabling both to benefit from the exchange of peaceful nuclear technology.

Regional Fissile Material Cut Off Treaty

A proposal to freeze production of fissile material was first made by the US President George Bush on May 29, 1991, as part of a comprehensive initiative on arms control in the Middle East.⁶⁸ But due to dissenting positions by some of the member states at the Conference on Disarmament (CD) Geneva, a consensus agreement on Fissile Material Cut Off Treaty (FMCT) has not been reached so far.

According to the July 18 Joint Statement both India and the US committed to work towards conclusion of a "multilateral fissile material cut off treaty" but India has so far refused to make any unilateral concessions as part of the deal for which the US Administration has come under severe criticism. In order to deflect growing cynicism, the

⁶⁸ Shai Feldman, "Nuclear Weapons and Arms Control in Middle East", (Cambridge: MIT Press, 1997), p.167.

administration forwarded a draft treaty bill at the CD on May 18, 2006,⁶⁹ which appeared to be more of a damage control exercise rather than any sincere effort towards restricting India's potential of increasing its fissile material.

Following the announcement of the nuclear cooperation agreement the international community has been repeatedly demanding from the US to take steps that could limit fissile material growth in Southern Asia, which otherwise could spiral out of control as a result of India's reluctance to freeze its fissile material increase, and could possibly lead to nuclear arms competition in the region. In this regard one of the options being propagated by the non-proliferation community is to have a regional fissile material control arrangement involving China, India and Pakistan pending formal negotiations at the Conference on Disarmament (CD).⁷⁰ It however would remain a debatable proposition as China would not like itself to be equated with South Asian neighbors in terms of its nuclear capability, while US remains outside of any obligations. Another option that appears to be more balanced in its approach is to deal with FMCT impasse outside the CD, and amongst the seven declared nuclear weapons states including Pakistan and India. This (5+2)⁷¹ approach as a transitory solution could have better chances of a success as it would reduce unwarranted clutter by countries that in any way do not produce fissile material for nuclear weapons. However, the key differences between major countries that have so far stalled FMCT negotiations at the CD, would still need to be addressed in between the major stake holders before any progress on a limited (5+2) FMCT could be made.

Regional Non-Proliferation Regime (RNR)

One of the projected advantages of the Indo-US nuclear cooperation is integration of India into mainstream non-proliferation regime. If the advantage is significant enough entailing exceptional treatment for India then the inclusion of other two outliers Israel

69 Acknowledgement by Department of State Spokesperson Sean McCormack on May 18, 2006, in Wade Bose "US Unveils Draft Fissile Material Treaty", Arms Control Today, June 2006. <www.armscontrol.org/act/2006_06/FissileTreaty.asp?print>

70 Daryl Kimball, Executive Director, Arms Control Association, Prepared Testimony for House International Committee, May 11, 2006. p.6.

71 A more workable solution proposed by Micheal Krepon of Stimson Center and Daryl Kimball of Arms Control Association.

and Pakistan becomes more logical to make non-proliferation regime more comprehensive and universal. As DG IAEA in his recent article wrote; “However fervently we might wish it, none of these three [Israel, India and Pakistan] is likely to give up its nuclear weapons or the nuclear weapons option outside of a global or regional arms control framework. Our traditional strategy – of treating such states as outsiders – is no longer a realistic method of bringing these last few countries into the fold”⁷²

India and Pakistan cannot join the Non Proliferation Treaty (NPT) and it would be unrealistic to expect that either of the two would give up their nuclear weapons capability for any moralistic reasons. At the same time there is a need to integrate Pakistan and India into mainstream non-proliferation regime, and put both India and Pakistan under some kind of treaty obligations, which could make them responsible NWS and preclude any possibility of nuclear proliferation.

To achieve global non-proliferation objectives, the idea of a Regional Non-Proliferation Regime (RNR) could be explored, which could involve India, Pakistan, and possibly US and China as guarantors. It is compartmentalization of the problem to deal with the two non-NPT members, which cannot be resolved without restructuring of the NPT, or both sides giving up their NWs. Involvement of China and the US in a RNR could ensure that the nuclear technology provided by these two or other members of the NSG is not misused for any other purpose. The arrangement though seems complex and difficult to negotiate but has the potential to address the problem of at least two of the three outliers. If optimism prevails, similar arrangement could then be extended to the third outlier Israel, which would make non-proliferation regime universal and more comprehensive.

Learning from the past experiences, RNR shall not have the utopian goals of nuclear disarmament, which is unlikely to work unless other NWS make sincere efforts towards global nuclear disarmament. A linkage could however be made between RNR and NPT, adding an obligation to the members of the RNR to work towards larger objectives of the NPT. The non-proliferation area is one where both India and Pakistan could have

⁷² Mohammad ElBaradei, “Rethinking Nuclear Safeguards”, June 14, 2006. <www.washingtonpost.com/wp-dyn/content/article/2006/06/13/AR2006061301498_p

common interests⁷³, as proliferation of nuclear technology to other regional countries would not be in their collective security interests.

Conclusion

The intense debate following the Indo-US nuclear cooperation agreement is reminiscent of the 1998 debate on the South Asia NWS tests, once India and Pakistan became overt NWS. The ongoing debate on the implications of the nuclear deal would continue to draw cynicism, if the proliferation concerns of the international community are not addressed through transparent actions of the parties involved. The deal if remain unchecked could once again destabilize the South Asian region having long term implications and lead to possible transformation of intra and inter regional alliance structures. The nuclear agreement has also highlighted the need to integrate the NPT outliers into mainstream non-proliferation regime through innovative approaches such as RNR that could ensure that non-NPT NWS do not export nuclear technology to other NNWS and in return are benefited from peaceful uses of nuclear technology.

73 Maj Gen (Retd) Mahmud Durrani, "Areas of Nuclear Cooperation", Islamabad Policy Research Institute (IPRI) Conference, Jan 5-6, 2006.