

India may lose control of its nuclear fuel

By MR Srinivasan

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MANY American politicians, Republicans as well as Democrats, have hailed the "Henry J Hyde, United States-India Peaceful Atomic Energy Cooperation Act of 2006" as historic. Nicholas Burns, the chief American negotiator, indulged in some hyperbole, describing it as "the Liberation Act 2006 for India." Some sections of the Indian media have been euphoric and advocated a rapid consummation of the deal and large-scale import of reactors and nuclear fuel, also involving the private sector. Other commentators have reached an opposite conclusion, namely that departures from the August 17, 2006 assurances given by the Prime Minister in the Rajya Sabha are far too serious to ignore. The Bharatiya Janata Party and the Communist Party of India (Marxist) have found the deal unacceptable for a variety of reasons.

There are indeed many serious changes from the July 2005 and March 2006 agreements between India and the US and I propose to highlight some of them in this article.

Indefensible position:

Let us begin with the most unacceptable provision, namely the suspension of all cooperation were India to conduct a nuclear test in future. We are aware that the United States itself is working on the design of a "Reliable Replacement Weapon" (RRW) to modernise its nuclear arsenal and may indeed carry out a test in future, if it considers this necessary. China may then test its own improved design. Pakistan too may carry out a test for its own reasons. A future Indian Government will be placed in a totally indefensible position, if its hands were tied under the Indo-US deal, which would be the case if India had installed imported reactors using imported nuclear fuel.

Let us also bear in mind that the

US Senate in the past rejected the Comprehensive Test Ban Treaty. What the Indo-US nuclear deal will do is to deny India the option of a test, for all time to come, even when circumstances beyond its control require it to do so.

The second issue concerns the assurance of fuel supply. The July 2005 agreement gave the impression that when India placed some of its reactors under "voluntary safeguards," such safeguards were linked to nuclear fuel supplies being maintained. In the March 2006 agreement, Washington insisted on the provision of "safeguards in perpetuity." To assuage Indian concerns, the US agreed that India could maintain adequate stockpiles of nuclear fuel to tide over any possible disruptions in supply. It also agreed to work with other nuclear suppliers to enable

India has developed its own technologies in these three vital areas.

Reprocessing of spent fuel:

When looking at an enlarged nuclear energy programme, using imported reactors, fuelled with enriched uranium, India may consider it economically attractive to produce enriched uranium, though under safeguards. Reprocessing of spent fuel to separate plutonium is extremely important in the Indian context. The Indian nuclear fuel cycle is crucially dependant on the use of Fast Breeder Reactors in the second stage and of thorium-based systems in the third stage. Separation of plutonium is essential for the eventual use of thorium as a nuclear fuel. India therefore expects that reprocessing will be an important activity of its nuclear energy programme. While the process designs will no doubt be

There are several provisions in the Hyde Act concerning the intent is to bring India into NPT, conferring on it the status of an NPT weapons state to the US appear minimal, the price India will have to pay will be a total loss of control over its future nuclear

India to secure nuclear fuel so that its nuclear power stations could continue to operate. The Hyde Act has removed this protection. What is more, the Act also calls upon the US administration to work with the Nuclear Suppliers Group to ensure that India cannot get supplies of nuclear fuel if, for reasons contained in the Act, the US is required to suspend supplies to India.

Third issue: The third issue concerns the scope of "full civilian nuclear energy cooperation" that was promised to India in July 2005. India had assumed that this term encompassed the fuel cycle, namely enrichment of uranium and reprocessing of spent fuel. In the discussions leading to the adoption of the Hyde bill, US legislators have argued that the US Atomic Energy Act of 1954 specifically forbids export of these technologies, as also heavy water production technology to other countries.

an Indian activity, denial of access to certain equipment or materials required by India, even when these activities are under IAEA safeguards, would be most unreasonable.

Some exceptions to the embargo on enrichment and reprocessing technologies are permitted in the Hyde Act. They are in respect of a multinational facility approved by the IAEA or a bilateral or multinational programme to develop a "proliferation-resistant fuel cycle." In the 1980s, the International Atomic Energy Agency carried out the 'International Fuel Cycle Evaluation' (INFCE) at the strong urging of the US. This study led to no specific conclusion as there was no convergence among the countries on their nuclear policies. While similar studies could be taken up in future, we are likely to see a replay of differences among the participating nations.

Serious imbalance: In the

its nuclear future

statement of policy, the Hyde Act calls for achieving a moratorium on the production of fissile material for explosive purposes by India, Pakistan, and the People's Republic of China. It may be recalled that China has been producing fissile material for weapons purposes for a long time and so stopping at the same point of time would lead to serious imbalance. The statement of policy goes on to say that the US shall "seek to halt the increase of nuclear weapon arsenals in South Asia and to promote their reduction and eventual elimination."

India's policy has always been that nuclear weapons should be eliminated as early as possible in all parts of the world. India has consistently opposed proposals for regional nuclear disarmament. By going ahead with nuclear coopera-

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tion with the US under the Hyde Act, India will lose all leverage to pursue the goal of universal nuclear disarmament and will be tied to elimination of nuclear weapons in South Asia.

With regard to the sequencing of actions, the understanding between India and the US was that the approval of the US Congress and removal of restrictions on nuclear trade with India would take place simultaneously with NSG clearance to make exemptions in favour of India and with India placing facilities designated as civilian by India under IAEA safeguards. The present Act requires India to have concluded "all legal steps prior to signature by the parties of an agreement requiring the application of IAEA safeguards in perpetuity..."; and also that "India and IAEA are making substantial progress towards concluding an Additional Protocol," among other conditions.

In "Definitions," it is clearly stated that the "Additional Protocol" is to be based on the Model Additional protocol of the IAEA applicable to non-nuclear weapon states, which is highly intrusive. In addition, the US President has to satisfy himself that India is working actively on an early conclusion of the FMCT; that India is supporting the US in preventing the spread of enrichment and reprocessing technologies; and that India adheres to the MTCR and NSG guidelines (without actually being invited to be a member of these bodies). These actions India is obliged to take are not consistent with what "a strategic partner" (which the US wishes India to be) should be taking. Neither are they consistent with what India — described as a "responsible state with advanced technology" — should be mandated to take.

Cosmetic changes: A section of the Indian media has noted with approval the changes made in the reporting requirements to meet India's concerns. These changes have been made but they are essentially cosmetic in nature. The intent of the Hyde Act is to bring India into the NPT obligations without conferring on India an NPT weapons state status. In the debate on the Bill, the legislators realised that without India in, US non-proliferation policies could not succeed. After India held out against the NPT for more than three decades and established an independent nuclear future in spite of great odds, it does appear that the US wishes to induct the country into the NPT, essentially as a non-weapon state, but with perhaps a weapons programme as a transient phase. The costs to the US appear minimal and the price India will have to pay may well be a total loss of control over its future nuclear policies.

The nuclear scientists, Parliament, civil society, and the Government must ponder over these serious issues before deciding to move ahead on the Indo-US nuclear deal. **COURTESY THE HINDU**

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