

Safeguards implications of the Indo US agreement

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Introduction:

The opening up of the nuclear industry to the global mainstream is a long cherished wish of all Indian nuclear scientists. And everything looked bright when the Bush Manmohan Singh agreement was signed as part of a wider cooperation between India and USA even accepting India as an emerging power. But as the scenarios emerged with further discussions, followed by the separation plan of the civil and strategic nuclear activities and finally the bill that is pending for passing before the US senate doubts started creeping in the minds of many. It is imperative that we look forward to the application part of the agreement and address to the possible problems and preempt them diplomatically.

We have to bear in mind that any final bilateral agreement with India by the US will naturally be governed by the provisions of the US bill in its final form and some of the implicit clauses will find its reflection in the bill also. At that point of time neither India nor the US may have a choice to compromise on those clauses. The analysis that follows is purely on the basis of the details of the bill, the views expressed by Government spokespersons on both sides. Any diplomatic efforts that might have gone behind the scenes to take care of the concerns or which might have a diluting effect on these due to the broader perspective of the bilateral and international relationships details of which are not available to us is naturally beyond the scope of the analysis. In a complicated matter as this such undercurrents are not uncommon.

US objective of the cooperation

Swapping civil nuclear assistance for ensuring cap on strategic applications is a well known track followed by USA in all its attempts to ensure nuclear hegemony such as South Africa, North Korea etc. One can notice a certain amount of urgency on the part of US to pass the bill applicable to India.

Condola Rice in a statement said “Let me be clear: We do not support India joining the NPT as a nuclear weapons state. Rather, the goal of our initiative

is to include India, for the first time ever, in the global non-proliferation regime. By requiring India to place two-thirds of the existing and planned nuclear reactors under the watchful eye of IAEA, the initiative would be a net gain for the cause of non-proliferation...”, The message could not have been more clearly stated.

From the contents of the bill and several analyses appearing in the media it is more or less clear that the objective of the safeguards controls aimed at by USA would be to ensure that the civil cooperation in nuclear energy would not in any way enable India to increase its weapon capability. In fact it is deeper, the objective is to make India indirectly a signatory to the various provision of the NPT, CTBT, FMCT protocols. The trumpeted intention of the US initiative is to help India in its power production requirements will remain as a cosmetic only.

Safeguard implications of the bill

Though the cherished intention of the GOI is that it will end our apartheid in the nuclear main stream, by all accounts it is not going to be so. What we may gain will be a few imported nuclear power stations and fuel for the Indian power stations but will not touch any other part of the nuclear fuel cycle which may be of dual use. In fact the embargo for our research centers which are declared out of bounds for safeguards would continue even more stringently with possible IAEA inspection to ensure that not only the material but the technology received through civil cooperation are not leaked into the non safeguarded installations. Right now at least there is no outside agency to control such indirect benefits.

The bill may involve restrictions of even exchange of personnel between civil and military applications. The IAEA safeguards regime applies only to materials and equipment and does not extend to personnel. U.S. may decide to use its own inspection mechanism to monitor movements of personnel. This can be uncomfortably intrusive.

All in all we can expect a lot of harsh and intruding counter currents in the area of safeguards inspection. The brunt of these features has to be borne by the technical personnel facing the safeguard inspectors at that time.

The separation of civilian and strategic facilities in the Indian atomic energy program is in itself very complicated since the two are intertwined under the

way in which these have evolved. If some vital facility such as BRIT, the isotope production facility of DAE (Dept. of Atomic Energy) under safeguards would have to depend on its supply of radio-isotopes to reactors under a non-safeguarded strategic facility (like Dhruva in BARC), it can lead to uncomfortable complications with the IAEA at a future date. Similarly an R&D institution like TIFR coming under safeguards may face unnecessary procedural problems if it undertakes some fundamental research which may have some relevance for some strategic applications. The situation may get complicated by the already agreed separation plan classifying R&D and production units as nuclear civil utilities which basically have nothing to do with safeguard related activities. They should have been left out.

There is another possible complication in arriving at a safeguard agreement with IAEA. The “Additional Protocols” of a Safeguard agreement could be sometimes deeply intrusive and uncomfortable! Further, the IAEA which is an International body with its mandate and statute from UN and its multi-national governing body, there is no provision to consider India as a special case having both safeguarded civilian installations and un-safeguarded weapon related institutions. This type of treatment under its mandate is reserved only the 5 nuclear weapon states. In its current protocols IAEA will not consider India as a weapon country but as a non weapon country. How dual status will be handled is to be seen when India tries to hammer a safeguard agreement with IAEA which is an obligation under the Indo USA treaty and calls for in depth negotiations. I am sure the IAEA strategy planning machine is already kick started to meet the intra-national proliferation objectives set by USA. US Bills specify the type of protocol India shall sign with the IAEA

Under the IAEA agreements there are 2 additional protocols one for the NPT states and another exclusively for the 5 weapon countries. The latter can offer selected facilities for safeguards inspection and can even withdraw at any time and there is no perpetuity clause. It is only a procedural cosmetic to make all countries look equal before safeguards.

The India specific nature of safeguards agreement seems to have caused a lot of complacency in us. But the bill leave us in doubt about this. The bill talks of the protocol with IAEA being “India specific”, prescribes, that the Additional Protocol to be signed with IAEA would be based on the Model

Additional Protocol as set forth in IAEA Information Circular (INFCIRC) 540. Infrac 540 is the one reserved for NPT countries and many a terminology and wordings in the bill are directly lifted from that. It would be too naive to conclude otherwise since the IAEA is bound by its mandate and there is no question of IAEA amending its mandates to accommodate India.

The inspections under INFCIRC/540 are of an entirely different order than the ones carried out in the case of Nuclear Weapons States. In their case, the inspections are perfunctory. In countries covered by INFCIRC/540 they are thorough, comprehensive and intrusive. Article II of the model Additional Protocol specifies that the IAEA shall collect data through inspections as intrusive and as comprehensive as it deems fit on every aspect of a country's nuclear programme. These inspections include: regular, short notice inspections and inspector access to all aspects of the nuclear cycles of the country — including R&D about future projects as well as all sites connected with the manufacturing, import and exports of materials; information about and providing access to all buildings on a nuclear site; wide area environmental sampling in and beyond declared locations as and when IAEA deems these necessary; the location, operational status and the estimated annual production capacity of uranium mines...(and) concentration plants for uranium and thorium... The country must also provide plans “for the succeeding 10-year period relevant to the development of the nuclear fuel cycle (including planned nuclear fuel cycle related R&D activities).

In conclusion what the final bilateral agreement which has to go by the US bill is to bind India to the provisions of the NPT protocols in perpetuity

The bill aims at a **more harsh** inspection regime The House Bill requires the US President to ascertain from India, and report to the US Congress:

“(i) an estimate for the previous year of the amount of uranium mined in India; (ii) the amount of such uranium that has likely been used or allocated for the production of nuclear explosive devices; (iii) the rate of production of: (I) fissile material for nuclear explosive devices; and (II) nuclear explosive devices; and (iv) an analysis as to whether imported uranium has affected such rate of production of nuclear explosive devices.”

The construction of additional installed capacity for non safeguarded applications such as reactors may also end up with restrictions under the implicit provisions of the bill (through FMCT tie up).

The objective of the US bill is at diametrically opposite to that of our stated intentions.

Our objective:

The objective of developing international civil nuclear cooperation is to augment our electricity production without in any way compromising the on-going domestic programme.

US objective:

Certainly conforms to the first part but in return binds India to NPT, CTBT and FMCT regime protocols. Thus the cost of energy production will be enormously prohibitive!

Our stand: Safeguards can start only after the cooperation is in place

The bill Envisages clearly the chronology to be followed in the cooperation viz having the safeguard agreement and commitments in place before waiving the US freeze.

Section 4(b)(2,3) of the House Bill specifies, that the agreement between India and the US will become effective only upon the US President filing a determination with the US Congress that, inter alia, “(2) India and the IAEA have concluded an agreement requiring the application of IAEA safeguards in perpetuity in accordance with IAEA standards, principles, and practices to India’s civil nuclear facilities, materials, and programmes. (3) India and the IAEA are making substantial progress toward concluding an Additional Protocol **consistent with IAEA principles, practices, and policies** that would apply to India’s civil nuclear program.”

Our stand

We will not agree to any dilution that will prevent us from securing the benefits of full civil nuclear cooperation.

US stand implies:

India will be out of bounds for all parts of nuclear fuel cycle except for imported power reactors and imported fuel for our safeguarded reactors,

since reprocessing and enrichment are dual use technologies and it is not the intention of US to assist India in any way to further its nuclear weapon program. And IAEA protocols will ensure that.

Our stand:

We have been adopting the philosophy of closed nuclear fuel cycle, recycling the reprocessed fuel for power production.

US Bill implies:

To impose gradually provisions of FMCT. A date by which this will happen has to be indicated before the agreement is in place. This may even jeopardize our chosen path of fast reactor program.

Our stand:

To deal with the spent fuel as waste stored away is not our nuclear fuel cycle philosophy.

Eventuality:

Though not specified in the bill about the fate of spent fuel, even if they allow reprocessing we may end up committing our sparse reprocessing resources for reprocessing safeguarded fuel, the products which we are not free to use. India has built up excellent expertise in construction of nuclear power stations of the PHWR type but same cannot be told about the reprocessing technology due to its being much more complex. The limited capacity of Indian reprocessing plants cannot be devoted to reprocessing the imported fuel even if it is allowed thus tying up the capability to production of fissile material which cannot be used in any applications including the fast reactor programs which are outside safeguard regime. The cooperation may not lead to any assistance in setting up reprocessing plants for imported fuel since the technology cannot be prevented from being used for other purposes.

India view: Our moratorium on tests is unilateral one, and our defense perspective will take the front seat.

US bill clearly ties up India for a test moratorium and CTBT. In effect US will see to it that it has the final say.

India stand: India has declared itself as a nuclear weapon state and will continue to sign NPT.

The Bill the provisions of which will be the guideline for framing the bilateral agreement will make applicable the NPT regime to India under the envisaged agreement with IAEA.

Conclusion:

Unfortunately our diplomatic efforts at this stage does not seem to be aimed at pre-empting the harmful features in the bill but ensuring that somehow the bill is passed in the senate by addressing the doubts of senators rather than making them address our doubts.

UNLESS INDIAN DIPLOMACY HAS TAKEN CARE OF THE VARIOUS ASPECTS to overcome the future complications we may be left with limited options. Sometimes there are deeper understanding between countries than that appears in the media!

Subject to the above the future alternatives for India are:

- Sign the Indo US bilateral agreement and kick start the cooperation

The negotiations at this stage will be cramped since it has to abide by the provisions of US legislations and it will not be correct for us to demand it to be otherwise. The consequences would be in that case that we may have to compromise our stand on several areas and will be forced to be in line with the objectives of US bill to bind India to the features of NPT, CTBT and FMCT regimes. The strategic features of the Indian programs may eventually turn out to be on paper only.

The corollary would be that the world will be divided into three kinds of states instead of the present two – viz., Weapon countries, NPT countries (Israel and Pakistan) and US bilateral agreement countries (at present only India). The former will continue their present privileged status and second type will continue to enhance their objectives by subtle methods and third type will be under the compulsions of the US acts.

- Refuse to sign the agreement

since by all accounts its provisions will compromise with the stand being taken by India. And continue as at present and face the situation politically and diplomatically.

AS Chairman AEC concluded taking the optimistic stand with or without the agreement India will go on her own:

“Our programme is going on well. If we succeed in developing cooperation, well and good. India is recognized worldwide as a non-proliferating country with advanced nuclear technology. We have reached this level of recognition on the basis of a self-reliant R and D carried out within the country.”