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A TRIBUNE SPECIAL
Roadblocks in N-power reform
Need to fix deficiencies in the Nuclear Liability Bill, says
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MONTHS after the Nuclear Suppliers Group (NSG) clearance and the Indo-US nuclear agreement, comprehensive reforms of the policy framework for nuclear power remain stalled. The fuel shortage for the operating nuclear plants has been relieved, enabling indigenous fissile material to be available for the strategic programme.

Nuclear power remains a government monopoly at a level of 4.5 GW, in the hands of the Nuclear Power Corporation of India Limited (NPCIL), while the need to strengthen regulatory systems remains unaddressed.



One suspects that the main short-term objective of the nuclear deal was to access nuclear fuel while maintaining state monopoly over the sector.

Otherwise, it is difficult to explain the tardiness in addressing key policy issues in this sector.

The hastily and poorly drafted nuclear liability bill remains stalled after many of its deficiencies were pointed out. The plan to achieve 20 GW of nuclear power (since scaled up to 45 GW, post the Indo-US deal) by 2020 requires a Herculean effort. At about \$2 million per MW, the financial outlay alone would be some \$30 billion, or \$80 billion if the more ambitious target mooted by the Prime Minister is considered.

This is a conservative estimate, based on efficient implementation, no cost escalation or delays. Experience in many countries indicates that the costs could well be more than this. Putting up one 1000 MW plant takes 5-7 years after the site has been obtained. Under Indian conditions, one can be realistic and expect cost and time overruns, especially if we go in for the latest European Pressurised Reactors of 1600 MW each.

Clearly, the government alone cannot implement such a programme. Nor should it. It has other heavy responsibilities such as the strategic programme, Thorium fuel cycle development, and regulatory, safety and security. The private sector should be the key participant in our future nuclear power development. To do this we have to move away from a narrow dog-in-the-manger approach and make comprehensive reforms to open up the sector to private participation, both Indian and foreign.

Experience of the Foreign Investment Promotion Board (FIPB) process shows that administrative ministries usually protect their PSUs from competition and loss of market share by opposing Foreign Direct Investment (FDI) in their sectors. Therefore, it is hardly surprising that the Department of Atomic Energy opposes FDI in the nuclear power sector. We have seen this before in sector such as power generation, civil aviation, where eventually reformers have prevailed, and the sectors have been released from the shackles of PSU domination.

Given the enormous financial and technical requirements of our nuclear power programme, we must allow FDI into the sector, up to 100 per cent as in the case of other power subsectors. Fair competition between the NPCIL and new players, and with other power producers must be ensured. Balance between the concerns of producers and consumers must be struck. This is the challenge before the regulatory system which must be faced. Only then will large-scale investment flow into the nuclear power sector.

The government seems to take the line that all future power projects must have the NPCIL as a majority equity partner. This means at least 50 per cent equity stake (if not more), and if one allows for a reasonable debt-equity ratio, the NPCIL would have to cough up some \$ 5 billion for the lower target, and some \$ 14 billion for the higher one.

Do we really want the entire nuclear power sector to be dependent on the NPCIL alone? Is it not better for the NPCIL to have to compete with other private players? Our experience with Air India should provide some food for thought. There should be no difficulties in allowing 100 per cent FDI for nuclear power projects, subject to security, safety and regulatory requirements being met.

The nuclear liability regime needs to be clarified to encourage private players into the sector. The deficiencies pointed out in the present Bill need to be fixed. Best practices followed in the European Union should be taken into account. The US practice may be somewhat unbalanced in favour of business interests.

Should we allow FDI into the sector, a system of security clearances for the foreign participant will be needed. In addition, there should be clear security guidelines and clearance procedures for all personnel involved in the construction and operation of nuclear power plants. This should be a uniform requirement, for all plants and not nationality specific.

Nationality alone cannot be the basis for security assessments. Many countries have adopted such systems for sensitive installations and there are plenty of examples to follow.

Safety is a prime consideration in the nuclear industry. The Atomic Energy Regulatory Board (AERB) is understaffed and needs to be strengthened to meet its increased responsibilities. A culture of openness and dialogue with the public will go a long way in removing apprehensions and objections to nuclear power.

While the government has selected sites for nuclear power complexes, already there are groups opposing such plans. Concerns of local stakeholders are important and must be met by highlighting and maximising specific benefits accruing to them.

Overall, the scenario for Indian nuclear power is gloomy, with a timid government, clinging on to outdated monopolistic policies, in spite of the momentum generated by the NSG clearance and the Indo-US nuclear deal. It is time for policymakers to wake up if they are really serious about targets.

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