Address by Shri Shyam Saran at the FEC Forum on India-Japan Cooperation in Peaceful Uses of Nuclear Energy

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Mr. Chairman, Hon'ble Mani Shankar Aiyar, Ambassador Hemant Krishan Singh, distinguished guests, ladies and gentlemen. I wish to thank FEC and its President for inviting me to address this august gathering on the subject of India-Japan Cooperation in the Peaceful Uses of Nuclear Energy. Your kind invitation has enabled me to visit this great and happening city, a city where I spent three very rewarding and pleasant years from 1986 to 1989, when I was Deputy Chief of Mission in the Indian Embassy. Those were the years of Japan's emergence as a great world economic power and a key political player in Asia. As we head into the new millennium, there is no doubt that Japan will make a significant contribution to peace and prosperity in Asia. Today, India, too, is an emerging power in Asia, with a rapidly growing economy. We see Japan as a strategic partner, contributing, as it has for many decades, to India's economic and social development. We have a strong historical bond and deep cultural affinity due to our shared Buddhist heritage. In more recent times, India and Japan value their role as vibrant democracies with a common stake in peace and prosperity in Asia. It is against this background that we must explore the prospects for civil nuclear energy cooperation between our two friendly countries.

At the very outset, let me state categorically that we understand and respect Japan's principled stand on nuclear non-proliferation and its political sensitivities concerning nuclear weapons. As the only country to have suffered the tragedy of the use of nuclear weapons, Japan's anathema to nuclear weapons and its emphasis on the Nuclear Non-Proliferation Treaty is well appreciated in India. People in Japan are aware that India has become a nuclear weapon state since 1998, but are not always familiar with India's stand on nuclear security issues. Before identifying areas where our two countries can forge a mutually beneficial partnership in civil nuclear energy, it may be worthwhile for me to acquaint you with India's nuclear security policy.

India, like Japan, has called for the total elimination of nuclear weapons, which are weapons of mass destruction. India is the only nuclear weapon state which has declared its conviction that its security will be enhanced not diminished, in a world free of nuclear weapons. We have called for the setting up of an Ad Hoc Working Group on Nuclear Disarmament at the Geneva Conference on Disarmament. We are prepared to engage in negotiations on nuclear disarmament in Conference as a responsible and serious stakeholder.

India is not a party to the Nuclear Non-Proliferation Treaty, but its record in non-proliferation since the dawn of the nuclear age, has been impeccable. There has never ever been a case of India involved in any transfer of sensitive technology or equipment to third countries. In May 2005, we passed the W.M.D. Act, applying wide-ranging export controls on sensitive and dual use technologies and products. Subsequently, we announced that we were also harmonizing our own export control lists with those of the Nuclear Suppliers' Group and the Missile Technology Control Regime despite being outside these arrangements. In the Indo-U.S. Joint Statement of 18 July, 2005, India also committed itself not to transfer any enrichment or reprocessing technology to third countries and to join global efforts to...
restrict such transfers in the future. While India has not signed the CTBT, it nevertheless continues to observe a unilateral and voluntary moratorium on testing. We are also prepared to take part in multilateral negotiations on an effectively verifiable and universally applicable Fissile Material Cut Off Treaty. The negotiations on a proposed treaty are currently held up at the Conference on Disarmament due to Pakistan's opposition.

Distinguished guests, Japanese friends should also be aware that pending nuclear disarmament, India has proposed that all nuclear weapon states bind themselves legally, never to use nuclear weapons. India is committed, in any case, to never be the first to use nuclear weapons and never to use such weapons against non-nuclear weapon states. I am mentioning these long-standing positions taken by India, to reassure Japanese friends that India remains fully committed to a world free of nuclear weapons, a vision which was very eloquently articulated by our late Prime Minister Rajiv Gandhi at the United Nations in 1988 and more recently embraced by President Obama of the U.S. We will be delighted if Japan joins hands with India in a common effort to rid our world of these most horrifying and destructive of weapons.

Let me now turn to the possibilities of civil nuclear energy cooperation between India and Japan. It should come as no surprise to this well-informed audience here that our two countries face a major challenge of ensuring energy security for our people. Japan's overall energy requirements are largely met by imported energy resources, with only 4% coming from domestic sources. Even if nuclear power is taken into account, over 80% of the country's energy needs are met from imports. India finds itself in a similar situation. Over 70% of our oil needs are met from imports. This figure is expected to rise to 90% by 2030. Even coal, which is the mainstay of our power industry, accounting for over 50% of generating capacity, will soon be insufficient for the projected increase in coal-based thermal power. It is estimated that by 2030, about two-thirds or three-quarters of our coal needs would have to be sourced from outside. Given India's rapidly growing economy, energy is likely to become a major constraint on our growth. Concern over climate change impacts of fossil fuel use, particularly the use of coal, will only add to this constraint. Therefore, like Japan, India, too, has put major emphasis on the rapid expansion of nuclear power, which is a clean source of energy and for which technology is proven and tested.

There are important similarities in the strategies adopted by India and Japan for the development of nuclear power. Japan has adopted a closed fuel cycle as its strategy, with a closed loop operation rather than a once through generation, resulting in toxic waste which will need to be managed. With reprocessing of spent fuel and setting up Fast Breeder Reactors, the problem of waste is minimized and dependence on imported fuel, such as uranium, is greatly reduced, if not eliminated. This is good for energy security.

India, too, has adopted a 3-stage nuclear energy development strategy, in which the first stage of uranium-fuelled reactors would generate reprocessed spent fuel for second generation Fast Breeder Reactors, enabling significant capacity expansion. India, of course, has a third stage where our vast resources of thorium could be used together with plutonium generated by FBR, to allow a very large expansion in capacity. To give you a sense of the capacities involved, India's Department of Atomic Energy estimates that India should be in a position to create around 500 gigawatts of power generating capacity based on plutonium, bred from indigenously available uranium. The third stage of thorium based reactors, would, conceptually, enable much larger generating capacities.

I wish to inform you that construction of a 500 MW FBR has already been launched in October 2008. We are aware that Japan's own prototype FBR at Monju, of 280 MW, has been shut down due to sodium leakage a couple of years ago. I understand that it may be revived soon. Since both our countries have plans for the early commercialization of FBRS, it would be worthwhile if we could engage in a collaborative effort, drawing upon each country's talent and expertise and the experience we have gained so far in our national FBR programmes.

The other area where there are rich possibilities for working together is in the area of reprocessing. India, like Japan, has put in place a comprehensive fuel cycle, from mining to reprocessing. Reprocessing is critical for our FBR programme as well as for efficient and safe waste management. The Japanese Rokassho reprocessing plant, which began operation in 1992, has been constructed with indigenous technology, with built in IAEA monitoring equipment and other advanced design features. Under the Civil Nuclear agreement India has concluded with the U.S., a dedicated reprocessing facility, under IAEA safeguards, will be built by India, for reprocessing, exclusively, foreign origin spent fuel. This is an important confidence building measure, but also an opportunity to design a state of the art, modern reprocessing facility. Japan's experience in this area would be welcome.
Mr. Chairman, dear friends, ladies and gentlemen, with the decision taken by the Nuclear Suppliers' Group in September 2008, to resume full civil nuclear energy commerce with India, there have been a series of bilateral cooperation agreements concluded with a number of friendly countries.

In this regard, it may be worth mentioning that India and Russia are already collaborating on the setting up of two 1000 MW reactors at Kudan Kulam. On March 13 this year, the two sides agreed to an ambitious road map for setting up 4 additional reactors of Russian design at Kudan Kulam itself and two more at a site in Haripur in eastern India.

With the United States of America, we are close to concluding agreement on administrative arrangements for implementing India’s upfront entitlement to reprocess spent fuel. This will pave the way for implementing the Letter of Intent already signed by the two countries, which will eventually result in 10,000 MW of additional nuclear power capacity being created.

Bilateral agreements have been concluded with France, Argentina, Kazakhstan, Namibia, and Mongolia, covering all aspects of civil nuclear cooperation, including nuclear fuel. Negotiations on a similar agreement with Canada have been concluded and await formalization. India and RoK have agreed to commence negotiations on a framework for civil nuclear cooperation.

Therefore, within a year and a half of the NSG decision, there has been keen interest in our partners to engage India both in nuclear energy commerce as well as in scientific and technical cooperation. This promising trend lends credibility to our plans to reach an installed capacity of 60,000 MW by 2030, both on account of international cooperation and expanded indigenous capabilities. We would welcome Japan participating in India nuclear energy development plans as a full and valued partner.

India’s nuclear power capacity currently stands at a modest 4000 MW, while Japan already possesses 47,500 MW of installed capacity. We understand that currently, in Japan, 3 more reactors of 3300 MW capacity altogether, are under construction, while another 13 are planned, adding 17,915 MW eventually. India will, therefore, be adding a much larger capacity of nuclear power in the 3 decades ahead than Japan. Therefore, the opportunities in this particular sector are immense and could give Japanese nuclear industry a major boost. This would be welcome at a time when advanced economies like Japan are facing depressed economic conditions. Indo-Japan cooperation in this field would also add substance to our strategic partnership. India is already making a major contribution to the International Thermal Energy Research project or ITER in which Japan is a lead country. There is already a mutual familiarity with our respective strengths and expertise and there is no reason why we cannot expand our cooperation further in this field.

Mr. Chairman, ladies and gentlemen, with both India and China, two continental sized economies, growing at a rapid rate, there is bound to be a major impact on the energy security of these two countries if their growth continues to be based on fossil fuels. This will also impact on the energy security of other countries, particularly those that are heavily dependent upon imports, like Japan is. In addition, we have to consider the adverse climate consequences of increased emissions from expanded carbon-based industrialization in India and China. It is in the interest of these two countries as well as the international community, including Japan, that they are encouraged and helped to bring about an accelerated shift to nuclear power, which is a safe and clean source of energy. Japan is already doing so in the case of China. Isn’t it time to consider the same for a fellow democracy and strategic partner as well?

Thank you for your attention.

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