Impact of the India-US Nuclear Deal and Opportunities in the Indian Market: An Overview

Introduction

Any development that takes place after close to 34 years can be deemed historic, and truly so, one such historic moment is India's global recognition as a nuclear power state. In September 2008, the Nuclear Suppliers' Group ("**NSG**")[1] approved an India specific exemption[2] and the India-US civilian nuclear deal was signed on October 11, 2008. This date can be marked as India's formal entry into the nuclear fuel and technology cooperation trade and beginning of trade relations with other nuclear fuel and technology supplying states such as the US, France, Russia and Canada.

Predictably, the NSG waiver will accelerate investments in India's "almost virgin" nuclear sector and provide ample scope for fuel mining, technology transfers and foreign investment. Since the nuclear energy sector is heavily regulated and monitored by the Indian government, it is crucial that companies who are looking to take advantage of India's *de facto* recognition as a nuclear state, are aware of legal hurdles that might come their way and are familiar with the politics governing the nuclear energy sector. The present newsletter will deal with the aforementioned subjects, the legal and regulatory concerns governing them and the statutory framework, as it stands at present, within which companies investing in the nuclear sector will have to operate.

1.0 Opening of the market

As a starting point, India's nuclear deal with the US has to translate into trade and commerce. Subsequent to India testing its first nuclear weapon in 1974, the NSG was formally set up and imposed a ban on the trade of nuclear materials, equipments, and technology with India. Since then, India has built both civil and military nuclear reactors with the available uranium resources and heavily depended on conventional sources for electricity generation. With the opening of the nuclear energy market, India can expect to increase its reliance on nuclear energy and gradually take the burden off the more conventional sources.

According to experts, India has to meet fuel demand of 20,000 MW of nuclear generated electricity by 2020 and the current uranium supplies are not adequate to meet such demand.[3] With the opening of the nuclear market, additional capacity will be added at a faster pace and help India achieve its 2020 target. The India-US nuclear deal specifically

[1] It was established in 1975 to contribute to the non-proliferation of nuclear weapons through the implementation of guidelines for nuclear exports and nuclear related exports. It also sought to make all nuclear power countries members of the Non-Proliferation Treaty ("**NPT**")

[2] Through this exemption, NSG permitted all its member states to trade in nuclear energy with India, which was previously banned since India was not a signatory to the NPT

[3] PR Log Press Release dated December 15, 2008 viewed at http://www.prlog.org/10155224-nsg-waiver-for-the-nuclear-deal-will-accelerate-investment-in-indias-nuclear-sector.html on January 18, 2010

provides for full civil nuclear energy cooperation covering nuclear reactors and aspects of the associated nuclear fuel cycle, including enrichment and reprocessing. It also provides for nuclear trade, transfer of nuclear material, equipment components and related technologies and for cooperation in nuclear fuel cycle activities.

Foreign and domestic companies now have a plethora of opportunities in the nuclear sector. At this stage, India needs cooperation from overseas and domestic companies to expand its nuclear industry and meet its targets. Some such areas are in the field of (a) Infrastructure development (*erection, construction and procurement*) and setting up of Nuclear Energy Parks; (b) Providing manufacturing facilities and raw materials for nuclear reactors, plants and other components; (c) Uranium fuel supply and other supplies from overseas reactor vendors; (d) Mining activities;[4] (e) Technology transfer; (f) Radioactive Waste Management Systems;[5] (g) Foreign Direct Investment ("**FDI**") in all sub-sectors within the nuclear energy sector and all ancillary sectors such as information technology.

2.0 Regulatory & Statutory position in India

2.1 Investment thresholds

Presently, no FDI is allowed in nuclear power plants but foreign investments are permitted by the private sector in the manufacturing of nuclear equipment and its construction. In the field of mining for atomic minerals, FDI[6] up to 74% is allowed through the government approval route,[7] except in the case of titanium. FDI of 100% with prior government approval is permitted in the mining and mineral separation of titanium bearing minerals and ores and in their value addition and integrated activities. However, such FDI for mineral separation is permitted only if the value addition facilities are set up within India along with the transfer of technology. The FIPB has become sensitive about national security issues and, therefore, it is necessary for investors to submit a foolproof application. The approval process may take approximately 10-12 weeks before any decision is made.

2.2 The Atomic Energy Act, 1962 ("AE Act")

The AE Act is the prime legislation governing and regulating any use of atomic and nuclear energy in India and the Atomic Energy Regulatory Board ("**AERB**") acts as the regulatory body for granting, renewal, withdrawal and revocation of licenses[8] for nuclear and radiation facilities. AERB also exercises control over nuclear installations and the use of radioactive substances and radiation generating plants outside such installations and,

[4] Often it is the government that acquires land for the purpose of conducting mining. Before such land is handed over to a foreign or private company, it is important to ensure that all compliances under the Land Acquisition Act have been undertaken and compensation issues have been settled

[5] Disposal of radioactive wastes is governed by the Atomic Energy (Safe Disposal of Radioactive Wastes) Rules. An application has to be made under these rules for permission to dispose radioactive wastes

[6] For the purpose of calculating FDI, reliance has to be placed on the Press Notes 2, 3 and 4 of 2009 issued by the Department of Industrial Policy & Promotion ("**DIPP**"). More information can be found at http://www.psalegal.com/pdf/REGULATORY%20AFFAIRS%20BULLETIN-ISSUE%20XII.pdf

[7] Approval has to be procured from the Foreign Investment Promotion Board ("**FIPB**")

[8] Licenses for establishing a radiation installation and handling of radioactive materials have to be procured under the Atomic Energy (Radiation Protection) Rules, 2004 on payment of a fee

therefore, all companies involved in the nuclear energy sector, must procure the necessary approvals and licenses from AERB.

The AE Act also provides for certain restrictions, especially in relation to the production, use and development of a nuclear energy plant. These provisions allow only state owned or government companies to undertake the aforementioned activities. Private participation is permitted only in the manufacturing of reactors and other nuclear equipment, supplying nuclear fuel, providing infrastructure facilities etc. The current policy does not permit private entities to approach the government for setting up an independent nuclear plant. It is hard to say when the AE Act will be amended to allow private participation, but nevertheless, the permitted activities provide sufficient opportunities for foreign and private players to trade and invest in the Indian nuclear market.

2.3 Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005 ("WMDDS Act")

Authorization is crucial while dealing with nuclear raw materials and other objects used while manufacturing nuclear weapons. The WMDDS Act was enacted to provide an integrated and overarching legislation prohibiting a range of unlawful activities in relation to Weapons of Mass Destruction ("**WMD**") and their related materials, equipment and technologies. The WMDDS Act does not constrain or limit India's nuclear programme but only helps in utilizing advance technology (including nuclear explosives) for India's security and national developmental requirements.

The WMDSS Act prohibits any unlawful manufacture, acquisition, possession, development or transportation of any nuclear explosive device (including a nuclear weapon) and if any person if found guilty, he/she will be punished with imprisonment of at least 5 years that may extend to imprisonment for life, in addition to a fine. Therefore, the use of any nuclear raw material or fuel must always be legitimate. Further, the WMDSS Act also prohibits export of such materials[9] and any transfer of technology[10] of an item whose export is prohibited as per Indian law. Any violation will attract imprisonment of at least 6 months up to a maximum of 5 years, along with fine.[11] In case the defaulting party is a company, all persons responsible for the conduct of the company's business will be deemed guilty.[12] In essence, this Act ensures that the dangerous raw materials and fuels used in a nuclear reactor are in possession only of authorized and licensed persons/companies.

2.4 The Civil Liability for Nuclear Damage Bill, 2009 ("CLND Bill")

One of the biggest deterrents for foreign investors is the lack of any ceiling on their liability in case of any nuclear accident. The Indian government recently proposed the

[9] See section 11 of the WMDDS Act
[10] See section 13(2) of the WMDDS Act. The transfer of technology may take place from within India to a place or person outside India, or from outside India to any place or person also outside India but the transfer is controlled by a citizen or resident of India
[11] Section 17 of the WMDDS Act states the quantum of punishment. For a second conviction of the same offence, the term of imprisonment will be a minimum of 1 year with a limit of 7 years, in addition to fine
[12] See section 20 of the WMDDS Act

CLND Bill to limit the liability of foreign nuclear suppliers and insulate nuclear energy companies from punitive legal consequences. In case of a nuclear accident, the CLND Bill puts a cap of US$ 450 million as compensation to be paid by the foreign/private company to the central government. If the actual damage and cost of remedying the impact of the accident exceeds the above mentioned threshold, the cost will have to be borne by the government. Some believe this to be contrary to the established Polluter Pays Principle and the Precautionary Principle prescribed by the Indian Supreme Court ("**SC**"). According to them, the financial costs of preventing or remedying damage caused by pollution, strictly and absolutely lies with the undertaking that causes the pollution. In the Oleum Gas Leak case (*M.C. Mehta v. Union of India*), the SC held that hazardous or inherently dangerous activities for private profit can be tolerated only on the condition that the enterprise engaged in such activity indemnifies all those who suffer in account of the carrying on of such activity, regardless of whether it is carried out carefully or not. It further stated that the enterprise is strictly and absolutely liable to compensate all those who are affected by the accident and such liability is not subject to any exception. Therefore, any law that may violate these principles is expected to be struck down by the SC.

If the CLND Bill is passed as it stands today, it will bring a respite to all foreign investors and India may witness large scale investments in the nuclear energy sector. However, the cap of US$ 450 million has to be assessed in light of the possible damage it can cause, and therefore, the final position will only be clear once the CLND Bill is passed in the Indian parliament (*though it will certainly face stiff opposition*) and the courts have to adjudicate upon a dispute arising from it.

3.0 Foreign Technology Collaboration ("FTC") Agreements

By Press Note No. 8/2009 dated December 16, 2009, the DIPP liberalized the foreign technology agreement policy. Previously, payment of royalties under FTC involving payment of a lump sum fee of US$ 2 million and payment of royalty of 5% on domestic sales and 8% on exports was allowed under the automatic route (without government approval). Where there was no technology transfer, royalty up to 2% of exports and 1% of domestic sales was allowed under the automatic route on use of trademarks and brand names of the foreign collaborator. If these thresholds were crossed, prior permission was sought from the Project Approval Board, DIPP. Since December 16, 2009, all payments for royalty, lump sum fee for transfer of technology and payments for use of trademark or brand name have been allowed under the automatic route without any threshold limits. However, all such payments will be subject to Foreign Exchange Management (Current Account Transaction) Rules, 2000.

This move by the Indian government will definitely facilitate free flow of technology. Specifically in the nuclear energy sector, where technology is a key element, such liberalization in norms will boost FTCs, thereby benefiting the Indian nuclear industry and encouraging investments through FDI.

Conclusion

The India-US nuclear deal and the NSG exemption have opened Indian doors for other nuclear states as well. The National Power Corporation of India Limited ("**NPCIL**")[13] is responsible for design, construction, commissioning and operation of thermal nuclear power plants and various foreign companies have already executed contracts with NPCIL to explore opportunities. NPCIL is also setting up Nuclear Energy Parks in various Indian states with collaboration from Russian, American and French companies. Clearly, opportunities are plenty and with the present government favouring the opening of the nuclear market, a further policy liberalization is anticipated. However, national security is always a concern and, therefore, all foreign and domestic companies must expect a stringent compliance regime and ensure strict adherence.

Companies with vast experiences, capabilities and vision in the nuclear sector and with a long term plan for India should make the most of the prevailing opportunities and "grow" alongside the "growing" industry. It is important that experienced entities enter India and gradually be involved at the policy making level to ensure that the Indian nuclear sector is at par with global industry standards. It is our expectation that specific guidelines may be drafted for uranium mining, external commercial borrowing and FDI may be permitted in the nuclear sector. Once the next phase of "nuclear liberalization" begins, companies already having a significant presence in India are most likely to benefit.

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[13] It is a government company under the administrative control of the Department of Atomic Energy, Government of India whose main objective is to operate the atomic power stations and implement atomic power projects for generation of electricity