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Strategic Significance of the India-Australia Civil Nuclear **Cooperation Agreement**



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On September 5, 2014, India and Australia signed a MoU for 'Cooperation in the Peaceful Uses of Nuclear Energy' during the Australian Prime Minister's visit to India. The agreement was signed by the Secretary, Indian Department of Atomic Energy and the High Commissioner of Australia to India.

The much awaited part of the civil nuclear cooperation agreement was Australian acceptance to become 'a long-term reliable supplier of uranium to India'. Besides, both countries underlined the need for cooperation in production of radio isotopes, nuclear safety and other areas not spelt out in the release. This may lead to comprehensive nuclear science and technology cooperation between India and Australia if the bilateral strategic partnership increases the newly acquired level of mutual trust.

In the India-Australia civil nuclear cooperation agreement, India was praised for continuing its nuclear energy policy. Unlike few countries, India had not done reflexive reaction to the Fukushima incidents by shutting down its nuclear power plants. After a few years or decades, when some of these countries resume nuclear energy, they may find losing several valuable years. The statement rightly pointed out that India's commitment to nuclear energy is to promote 'sustainable development' and energy security.

The government of India has frequently been notifying about the proposed plan for the nuclear energy expansion. The nuclear power capacity is expected to reach 10080 MW by 2017. India also plans to start work on 19 new nuclear power reactors by 2017. If this plan materialises it may have a total capacity of 17400 MW more in its energy basket. Earlier, India had planned to install about 20 GWe nuclear power by 2020² and 274.56 GWe by 2052.³ The plan may witness some adjustments.

The current nuclear expansion plan needs uranium. Though India has relatively large reserves of thorium oxide⁴, its uranium reserves are comparatively modest. As of May, 2014, India has 2,11,473 tonne in situ U308 (1,79,329 tonne Uranium) reserves.⁵ It regularly assesses the "technoeconomic viability" of extraction and development of uranium resources. Not all uranium deposits explored are mined and processed. On various occasions, mining and exploration of uranium reserves have been discontinued because of the low economic feasibility.

The Department of Atomic Energy (DAE) admitted in the past that shortage of uranium had affected the functioning of the power plants. In an answer to a question in the Indian Parliament, the government stated, "The Country's Uranium requirement in the 12th Five Year Plan [2012-2017] period is estimated to be 5057 tonnes. This includes 318 tonnes of low enriched uranium for Tarapur Atomic Power Station (TAPS) -1&2 and Kudankulam (KK) -1&2."6 The Indian nuclear establishment maintains that the known uranium deposits can feed nuclear power plants with a capacity of about 10,000 MWe only.7

After the 2008 NSG exemptions, India signed agreements and contracts with several countries for the supply of uranium. It signed agreements with countries such as Namibia and Canada for uranium supply. However, so far, it

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has signed contractual agreements with the companies of only four countries – M/s AREVA, France (during 2008), M/s JSC TVEL Corporation, Russia (during 2009), M/s NAC Kazatomprom, Kazakhstan (during 2009) and M/s NMMC, Uzbekistan (2013). Regarding the uranium supply the Department of Atomic Energy informed the Indian Parliament as follows:

- i. M/s. AREVA, France one time supply of 300 MT of Natural Uranium Ore Concentrate during 2008-09 and 2009-10.
- ii. M/s JSC TVEL Corporation, Russia 2000 MT of Natural Uranium Oxide Pellets to be supplied in quantities of 200-400 MT annually; and Supply of 58 MT (one-time) Enriched Uranium Di-oxide Pellets received during 2009-10.
- iii. M/s NAC KazatomProm, Kazakhstan 2100 MT of Natural Uranium Ore Concentrate to be supplied in quantities of 300-400 MT annually during 2009-2014.
- iv. M/s. NMMC Uzbekistan 2000 MT of Uranium in the form of Uranium Ore Concentrate during 2014-2018."

The Prime Ministers of India and Australia have instructed their respective negotiators to work out 'the administrative arrangement' as soon as possible. Only after signing the contractual agreements, the Australian supply of uranium may come to India. The contractual agreement may incorporate the price, the period of supply, the form of uranium and other relevant details. India wants to diversify its uranium supply, and it is strategically important to have diversified suppliers. This helps in not only getting access to the uranium market for procuring the material on reasonable price but also to have an uninterrupted supply of uranium for its existing and new nuclear plants. India has already planned to build a uranium stockpile.

Currently, Australia is considered to have the largest reserve of recoverable uranium. In the coming years, too, its dominance appears unchallenged. The World Nuclear Association and the Australian government both inform that Australia ranks third in terms of production of uranium. Kazakhstan and Canada produce more than Australia. If it opens new mines, which it is planning to do, its production may easily increase, and possibly, it will become the top producer within a few years. Australia produces uranium basically to export as it does not operate any nuclear power plant. So, Australia may be the most important uranium supplier to India.

Quite significantly, before signing the agreement the Australian delegation announced that the safeguards issue had been resolved. The Australian Prime Minister told the media that suitable safeguards will be applied to the supplied Australian uranium to India. It seemingly means that the umbrella agreement of the International Atomic Energy Agency (IAEA) will continue to be the template for the agreement. Any extra-IAEA best practice was resisted in the past by Indian negotiators. In fact, the 2012 announcement by Julia Gillard, the former Prime Minister of Australia had in fact harmonised the NPT framework for Australian uranium export policy to the framework for the 2008 NSG-exemptions for India. The administrative arrangement will, with all the probability, reflect this harmonised Australian uranium policy and India's willingness to embrace the umbrella safeguards agreement it signed with the IAEA. This heralds India's further accommodation with the global nuclear order.

As Australia and India have to deepen their security cooperation for a peaceful prosperous and stable Asia Pacific region, both the countries will have to manage global nuclear commerce together. One of the insightful Australian strategic commentators, Rory Medcalf rightly said, it is "impossible to imagine that global non-proliferation will be sustainable if such a vast country like India is permanently locked out of the rule-making system." The civil nuclear cooperation agreement needs to be treated as an important step towards accommodating India in the NSG.

Views expressed are of the author and do not necessarily reflect the views of the IDSA or of the Government of India

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