

A New Era Begins for India-US Civil Nuclear Cooperation

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The Year 2025 has started on a bright and positive note for India-US cooperation in civilian nuclear energy. Visiting India for the last time as US Secretary of State on 6 January 2025, Jake Sullivan noted that the US is finalising steps to remove “long-standing regulations that have prevented civil nuclear cooperation between India’s leading nuclear entities and US companies”. Consequently, the US Bureau of Security has removed the names of three Indian institutions, the Bhabha Atomic Research Centre (BARC), Indira Gandhi Centre for Atomic Research (IGCAR) and Indian Rare Earths Limited (IREL) from the entity list. Representing a core component of the US’s export control policy intended to prevent proliferation of Weapons of Mass Destruction, the entity list basically consists of names of individuals, businesses or organisations to whom exports of certain technologies and goods are restricted. This development came after U.S. Assistant Secretary of State for Energy Resources Geoffrey R. Pyatt in February 2024 termed the nuclear deal an “important piece of unfinished business” which both countries had a “shared interest” in moving forward with.

The history of the India-US Agreement on Civilian Nuclear cooperation, which was ratified in 2008 marks an important milestone in the history of India-US relations. It was in 2004 that the Prime Minister Atal Bihari Vajpayee and President George W. Bush announced the [Next Steps in Strategic Partnership \(NSSP\)](#) which laid the groundwork for the elevation of bilateral ties to that of a strategic partnership in 2005. The NSSP essentially outlined three specific areas for cooperation: civilian nuclear technologies, civilian space technologies as well as trade in high technologies. Given a history of bilateral relations marred by distrust in the post-1971 era, cooperation over these areas symbolised a dramatic turnaround from estrangement to engagement. The subsequent era witnessed both parties take several steps to overcome hurdles that kept the agreement from materialising. India on one hand brought its civilian nuclear facilities under the International Atomic Energy Agency’s safeguards. The USA on the other hand took note of India’s impeccable non-proliferation record while acknowledging India as a “[responsible state with advanced nuclear capabilities](#)”. Both sides demonstrated a tremendous amount of political will to appease their domestic constituencies to finally ratify the

agreement in 2008. Later, India would also gain a waiver from the Nuclear Suppliers’ Group allowing it to engage in nuclear trade and commerce.

The coming into being of the Agreement marked a fundamental shift in the bilateral relationship which went through several ebbs and flows amid Cold War geopolitics. However, a combination of “[insurance, technological and regulatory barriers](#)” have prevented the agreement from materialising over two decades. American nuclear energy companies including GE-Hitachi and Westinghouse were reluctant to oblige, partly due to the Civil Nuclear Liability Act, 2010, which imposes a strict liability on nuclear plant operators. The 10 CFR 810 regulation of the US Atomic Energy Act which bars US nuclear companies from manufacturing or designing equipment in foreign countries also served to halt the materialisation of the agreement. Meanwhile, the differences in design, fuel and operational protocols between India’s indigenous Pressurised Heavy Water Reactors (PHWR) and the globally popular Light Water Reactors has also prevented technology transfer and collaboration between Indian and American entities.

The symbolic significance that the materialisation of India-US Civil Nuclear Deal holds for ushering in a new phase in the bilateral relationship cannot be understated. Even as the cooperation envisaged under iCET (US-India Initiative on Critical & Emerging Technologies) is picking up, nuclear energy is set to re-emerge as a central pillar of cooperation. This is particularly so as India is seeking to deploy its [Bharat Small Reactors \(BSR\)](#) to enhance its energy security and achieve net zero goals, with the USA trying to manage China’s efforts to capitalise on a growing global interest in Small Modular Reactors. The dynamic is expected to yield a win-win situation for both parties, with US companies entering into the Indian nuclear energy market to enter into joint ventures with Indian entities and further the spirit of self-reliance as envisaged under Make in India to achieve energy security.