

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO - 1705
ANSWERED ON 29/07/2026

NUCLEAR POWER GENERATION CAPACITY

1705. SHRI SHAFI PARAMBIL

Will the PRIME MINISTER be pleased to state:-

- (a) the present installed nuclear power generation capacity in the country, plant-wise along with its percentage contribution to the total electricity generation;
- (b) the details of nuclear power projects under construction and those approved during the last five years indicating their present status and expected dates of commissioning;
- (c) whether the Government has fixed any target for expanding nuclear power capacity by 2030 and 2047 and if so, the details thereof;
- (d) the measures taken to promote indigenous nuclear technology, ensure fuel security and enhance public safety at nuclear power plants; and
- (e) the steps taken to encourage private sector participation in the nuclear power sector in accordance with the existing legal framework?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) The present installed nuclear power capacity in the country is 8,780 MW comprising of 24 nuclear power plants, contributing about 3.1% in 2025-26 in total electricity generation. The details are tabulated in Annexure.
- (b) The details of nuclear power projects under construction and their present status are tabulated below.

Location	Project	Capacity (MW)	Physical Progress/ Status (as of June 2026)	Expected Date Of Commissioning
Projects Under Construction / Commissioning				
Rajasthan	RAPP-8	1 X 700	96.26 %	In advanced stage of commissioning (expected to be operational in 2026)
Kudankulam, Tamilnadu	KKNPP-3&4	2 X 1000	82.65 %	June-2027/ June-2028
	KKNPP- 5&6	2 X 1000	45.00 %	June-2029/ March-2030

Gorakhpur, Haryana	GHAVP-1&2	2 X 700		Completion of construction and commissioning is expected to be completed in about 6 years from First Pour of Concrete. FPC will start after completion of ground improvement works of Nuclear Island.
Kaiga, Karnataka	KAIGA-5&6	2 X 700		June-2031/ June-2032

(c)& (d) Yes. The Government has drawn up a roadmap for reaching the 100 GW nuclear power capacity by 2047, as announced in the Nuclear Energy Mission. As per the roadmap, the present nuclear power capacity of 8.78 GW is expected to reach about 22 GW by 2031-32. Another 32 GW of nuclear power capacity is envisaged to be set up under NPCIL beyond 2032 which will comprise of indigenous Pressurised Heavy Water Reactors (PHWRs) and Light Water Reactors (LWRs). Additionally, the Government has approved the pre-project activities of 2 x 500 MW FBR 1 & 2, to be built with the same design as of PFBR of Kalpakkam. The balance of 45 GW comprising of reactors of different technologies, is expected to be set up by other Public Sector Enterprises (Central & State), Private sector and Joint Ventures in different business models.

Highest priority is accorded to safety in all aspects of nuclear power viz. siting, design, construction, commissioning, and operation. Nuclear power plants are designed adopting safety principles of redundancy, diversity and provided fail-safe design features following an overlapping defence-in-depth approach, in line with codes and guides of Atomic Energy Regulatory Board (AERB). There is a robust regulatory mechanism of safety reviews at multiple levels. The safety of nuclear power plants is continuously monitored and reviewed by the AERB. Required fuel security is ensured by Nuclear Fuel Complex, a constituent unit of Department of Atomic Energy, Government of India.

(e) The Government has announced a Nuclear Energy Mission to reach a capacity of 100 GW nuclear power capacity by 2047 and formulated a roadmap for the same. The Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Act 2025 enables wider participation in the nuclear power sector, both from public and private sector.

Annexure

Maharashtra	Tarapur	TAPS-1	160
		TAPS-2	160
		TAPS-3	540
		TAPS-4	540
Rajasthan	Rawatbhata	RAPS-2	200
		RAPS-3	220
		RAPS-4	220
		RAPS-5	220
		RAPS-6	220
		RAPS-7	700
Tamilnadu	Kalpakkam	MAPS-1	220
		MAPS-2	220
	Kudankulam	KKNPP-1	1000
		KKNPP-2	1000
Uttar Pradesh	Narora	NAPS-1	220
		NAPS-2	220
Gujarat	Kakrapar	KAPS-1	220
		KAPS-2	220
		KAPS-3	700
		KAPS-4	700
Karnataka	Kaiga	KGS-1	220
		KGS-2	220
		KGS-3	220
		KGS-4	220
