GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
STARRED QUESTION NO. 251
ANSWERED ON 17.12.2025

NUCLEAR POWER PLANTS AND PROJECTS IN THE COUNTRY

*251. SHRI TATKARE SUNIL DATTATREY

Will the PRIME MINISTER be pleased to state:-

(a) the current number and details of nuclear power plants in the country along with gross capacity and the maximum dependable power generation or maximum continuous capacity;

(b) the number and details of the nuclear power plants under construction and initiatives taken to promote research and development of Nuclear Small Modular Reactors (SMRs);

(c) the details of private partnerships, if any, under the Nuclear Energy Mission;

(d) the details of partnerships with foreign countries, if any, under the Nuclear Energy Mission along with the role of National Thermal Power Corporation (NTPC) in expanding nuclear power capacity in the Country; and

(e) the details of collaboration between NTPC and Nuclear Power Corporation of India Limited (NPCIL)?

ANSWER

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

(a) to (e): A Statement is laid on the Table of the House.

******

Government of India
Department of Atomic Energy

STATEMENT REFERRED TO IN REPLY TO PARTS (A) TO (E) IN RESPECT OF LOK SABHA STARRED QUESTION NO. 251 FOR REPLY ON 17.12.2025 REGARDING "NUCLEAR POWER PLANTS AND PROJECTS IN THE COUNTRY" ASKED BY SHRI TATKARE SUNIL DATTATREY.

(a) Presently, there are 24 nuclear power plants (excluding RAPS-1, which is under extended shutdown) in commercial operation in the country with a total capacity of 8,780 MW. Of these, four reactors with a total capacity of 760 MW are presently in project mode for Renovation and Modernisation (R&M)/Refurbishment. The remaining 20 reactors with a total capacity 8020 MW are in operation. The details are given in Annexure-I.

(b) There are eight nuclear power reactors with a total capacity of 6600 MW at various stages of construction/ commissioning and ten reactors (7000 MW) are under pre-project activities. The details are given in Annexure-II.

Under the Nuclear Energy Mission announced in the Union Budget 2025–26, a total budgetary provision of ₹20,000 crore has been made for the research, design, development, and deployment of Small Modular Reactors (SMRs). This allocation is aimed at supporting India's objective of developing and operationalizing at least five indigenously designed SMRs by 2033. BARC has initiated design and development works on SMRs namely,

(i) 200 MWe Bharat Small Modular Reactor (BSMR-200),

(ii) 55 MWe Small Modular Reactor (SMR-55), and

(iii) Up to 5 MWth High temperature gas cooled reactor meant for hydrogen generation.

(c) The Nuclear Energy Mission (NEM) envisages reaching a capacity of 100 GW by 2047 from present installed capacity of 8.78 GW (excluding RAPS-1, 100 MW). Of this, PSUs of DAE are expected to contribute about 58-60 GW and the balance is expected to be set-up by Public and Private sector companies.

(d) NPCIL is already setting up four reactors with a capacity of 4 GW in cooperation with Russian federation. As a part of its road map to reach about 54 GW by 2047, NPCIL plans setting up of another 17.6 GW capacity with foreign cooperation. NTPC is the largest power company in the country which also has plans to set up nuclear power plants. In this context, NTPC has entered into a JV with NPCIL named, Anushakti Vidhyut Nigam Limited (ASHVINI).

(e) The Government on September 11, 2024 accorded approval to the Anushakti Vidhyut Nigam Limited (ASHVINI), a Joint Venture (JV) of NPCIL (with 51% stake) and NTPC (with 49% stake) Limited, to take up nuclear power generation and associated activities in the country. The Government has also approved implementation of Mahi Banswara 1 to 4 (4X700 MW) project by ASHVINI.

Annexure-I

Details of Operational Nuclear Power Plants In the Country

State	Location	Unit	Capacity (MW)
Maharashtra	Tarapur	TAPS-1$	160
		TAPS-2$	160
		TAPS-3	540
		TAPS-4	540
Rajasthan	Rawatbhata	RAPS-1*	100
		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

'*' RAPS-1 (100 MW) is under extended shutdown.
'$' TAPS-1, TAPS-2, MAPS-1, KGS-1 in project mode for Renovation and Modernisation (R&M)/Refurbishment

Annexure-II

Details of under construction Nuclear Power Plants in the Country

State	Location	Project	Capacity (MW)
Projects Under Construction / Commissioning			
Rajasthan	Rawatbhata	RAPP-8	1 X 700
Tamilnadu	Kudankulam	KKNPP-3&4	2 X 1000
		KKNPP-5&6	2 X 1000
Haryana	Gorakhpur	GHAVP-1&2	2 X 700
Tamilnadu	Kalpakkam	PFBR – Prototype Fast Breeder Reactor	1 X 500
Projects Under Pre-project Activities			
Karnataka	Kaiga	Kaiga-5&6	2 X 700
Haryana	Gorakhpur	GHAVP– 3&4	2 X 700
Madhya Pradesh	Chutka	Chutka-1&2	2 X 700
Rajasthan	Mahi Banswara	Mahi Banswara-1&2*	2 X 700
		Mahi Banswara-3&4*	2 X 700

* Mahi Banswara-1&2 and Mahi Banswara-3&4 being implemented by ASHVINI, a Joint Venture of NPCIL and NTPC

******