GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO.487
TO BE ANSWERED ON 07.12.2023

Growth in nuclear power generation capacity

487 Shri G.V.L. Narasimha Rao:
Shri Neeraj Shekhar:
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Will the PRIME MINISTER be pleased to state:

(a) the details of the current nuclear power generation capacity in the country, categorised by specific reactors;

(b) statistics on the growth in the country's nuclear power generation capacity over the past four years; and

(c) the measures being implemented by the Government to advance the creation of indigenous technologies for generating nuclear power?

ANSWER

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

(a) The details of the present installed nuclear power capacity in the country, categorized by specific reactors are given in Annexure.

(b) Over the past four years, nuclear power generation capacity has grown by 700 MW from 6780 MW to 7480 MW with the start of commercial operation of KAPP-3 (700 MW) at Kakrapar in Gujarat.

(c) The Government is fully supporting the development of advanced technologies for the indigenous three-stage nuclear power programme. While the first stage Pressurised Heavy Water Reactor technology has been mastered and reached commercial maturity, development of advanced technologies of second stage

Fast Breeder Reactors and third stage thorium based reactors along with associated fuel cycle technologies is being supported by the Government. The government is also supporting development of indigenous Small Modular Reactor (SMR) technologies.

The government has also enabled large deployment of indigenous technology based reactors by according administrative approval and financial sanction of 10 indigenous 700 MW PHWRs in fleet mode in one go.

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Annexure

State	Location	Unit	Type of Reactor	Capacity (MW)	Date of Start of Commercial Operation
Maharashtra	Tarapur	TAPS-1	Boiling Water Reactor (BWR)	160	28 October 1969
		TAPS-2		160	28 October 1969
		TAPS-3	Pressurised Heavy Water Reactor (PHWR)	540	18 August 2006
		TAPS-4		540	12 September 2005
Rajasthan	Rawatbhata	RAPS-1*		100	16 December 1973
		RAPS-2		200	01 April 1981
		RAPS-3		220	01 June 2000
		RAPS-4		220	23 December 2000
		RAPS-5		220	04 February 2010
		RAPS-6		220	31 March 2010
Uttar Pradesh	Narora	NAPS-1		220	01 January 1991
		NAPS-2		220	01 July 1992
Gujarat	Kakrapar	KAPS-1		220	06 May 1993
		KAPS-2		220	01 September 1995
		KAPP-3		700	30 June 2023
Karnataka	Kaiga	KGS-1		220	16 November 2000
		KGS-2		220	16 March 2000
		KGS-3		220	06 May 2007
		KGS-4		220	20 January 2011
Tamil Nadu	Kalpakkam	MAPS-1		220	27 January 1984
		MAPS-2		220	21 March 1986
	Kudankulam	KKNPP-1	Pressurised Water Reactor (PWR)	1000	31 December 2014
		KKNPP-2		1000	31 March 2017

** RAPS-1 (owned by DAE & operated by NPCIL) is under long shutdown.*
TAPS 1&2, MAPS-1 and RAPS-3 are presently in project mode for refurbishment / renovation & modernization
BWR and PWR are collectively referred to as LWR (Light Water Reactors)