

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO.3201
TO BE ANSWERED ON 31.03.2022

STEPS TO INCREASE CAPACITY OF NUCLEAR POWER GENERATION

3201 # Shri Neeraj Dangi:

Will the PRIME MINISTER be pleased to state:

- (a) the details of nuclear power generation capacity in the country at present, reactor-wise;
- (b) whether Government proposes to increase the said capacity, if so, the details thereof; and
- (c) the steps being taken by Government to develop indigenous technologies for nuclear power generation?

ANSWER

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

- (a) The details are given in annexure.
- (b) Yes, Sir. The Government has accorded administrative approval and financial sanction for construction of ten (10) indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode. On progressive completion of the projects under construction (8700 MW) and those accorded sanction (7000 MW), the nuclear capacity is expected to reach 22480 MW by the year 2031.
- (c) The Pressurised Heavy Water Reactor (PHWR) technology has been indigenously developed in the country and has reached commercial maturity. The unit size of PHWRs has been increased from 220 MW to 540 MW and further to 700 MW. The components and equipment for these reactors are being supplied by the Indian industries and works executed by Indian contractors. The PHWRs have almost full indigenous content. In addition, plants at Kudankulam are constructed in collaboration with Russian Federation. For these plants major reactor system equipment are imported. However, the construction and general services are made by Indian firms.

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
Tamil Nadu	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
Karnataka	Kaiga	KGS-1	220
		KGS-2	220
		KGS-3	220
		KGS-4	220

[@] RAPS-1 is under extended shutdown for techno-economic assessment
[&] TAPS-1&2 and MAPS-1 are presently under project mode.