GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION NO. 4668 TO BE ANSWERED ON 24.03.2021

OPERATIONAL NUCLEAR POWER PLANTS

4668. DR. SUJAY RADHAKRISHNA VIKHE PATIL: DR. SHRIKANT EKNATH SHINDE: SHRI DHAIRYASHEEL SAMBHAJIRAO MANE: SHRI UNMESH BHAIYYASAHEB PATIL: DR. HEENA GAVIT:

Will the PRIME MINISTER be pleased to state:

- (a) the total number of Nuclear Power Plants/reactors operating as on date, State-wise along with the quantum of energy produced by each plant/reactor;
- (b) the total number of new nuclear power stations / reactors proposed to be set up, State-wise along with the total quantum of power likely to be produced from these proposed new nuclear power stations/reactors;
- (c) the funds earmarked and allocated for these new projects during the current year and the time by which the power production is proposed to commence and commercialised by these plants/reactors;
- (d) whether the nuclear reactors set up in the country are safe according to the international nuclear standard; and
- (e) if so, the details thereof along with the frequency of security tests conducted in nuclear reactors and the authority responsible for such tests?

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 A.
- (b)&(c) The details are given in Annexure B.
- (d) Yes, Sir.

(e) All the nuclear power reactors are designed in accordance with the codes and guides of the regulatory authority i.e. Atomic Energy Regulatory Board (AERB), which are in line with the International Standards.

A multi-tier safety mechanism comprising safety review committees within Nuclear Power Corporation of India Limited (NPCIL) and safety review committees in the regulatory authority i.e. AERB is in place to monitor the safety of nuclear power plants. In addition, a framework of periodic safety reviews, audits and inspection is in place, for ensuring safety. AERB team conducts periodic structured on-site inspections. In addition, inspections during Biennial Shutdowns of nuclear power reactors and unannounced inspections are also undertaken by AERB.

Annexure-A

State	Location	Unit	Capacity (MW)	Lifetime Commercial Generation, upto February-2021 (in Million Units, MU) ^{\$}
Maharashtra	Tarapur	TAPS-1	160	49157
		TAPS-2	160	50702
		TAPS-3	540	53685
		TAPS-4	540	51589
Rajasthan	Rawatbhata	RAPS-1	100	11821
		RAPS-2	200	43367
		RAPS-3	220	32873
		RAPS-4	220	32704
		RAPS-5	220	20165
		RAPS-6	220	17482
Uttar Pradesh	Narora	NAPS-1	220	36357
		NAPS-2	220	35911
Gujarat	Kakrapar	KAPS-1	220	32007
		KAPS-2	220	33860
Karnataka	Kaiga	KGS-1	220	30528
		KGS-2	220	31040
		KGS-3	220	19284
		KGS-4	220	17406
Tamil Nadu	Kalpakkam	MAPS-1	220	34934
		MAPS-2	220	39706
	Kudankulam	KKNPP-1	1000	29879
		KKNPP-2	1000	17990

\$ The generation figures are rounded to nearest integer.

Annexure-B

State	Location	Project	Capacity (MW)	Sanctioned Cost (Rs. crore)	Allocated BE 2020-21 (Rs. crore)	Expected Completion				
Projects Under Construction										
Gujarat	Kakrapar	KAPP-3&4	2 x 700	11459 [#]	1208	2021/22				
Rajasthan	Rawatbhata	RAPP-7&8	2 X 700	12320 [*]	1717	2022/23				
Tamil Nadu	Kudankulam	KKNPP-3&4	2 X1000	39849	6700	2023				
	Kalpakkam	PFBR ^{&}	500 ^{&}	5677	70	2022				
Haryana	Gorakhpur	GHAVP-1&2	2 x 700	20594	1575	2026/27				
Projects Accorded Administrative Approval & Financial Sanction										
Madhya Pradesh	Chutka	Chutka-1&2	2 X 700		121					
Karnataka	Kaiga	Kaiga -5&6	2 X 700		81					
Rajasthan	Mahi	Mahi Banswara - 1&2	2 X 700	105000	87	Progressive Completion				
	Banswara	Mahi Banswara - 3&4	2 X 700			by 2031				
Haryana	Gorakhpur	GHAVP-3&4	2 X 700		103					
Tamil Nadu	Kudankulam	KKNPP-5&6	2 X1000	49621	1430	2026/27				

[&] Implemented by BHAVINI

'#' under revision to Rs.16580 crore

'*'under revision to Rs.17079 crore