

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 971
TO BE ANSWERED ON 26.07.2023

Nuclear Power Plants

971. SHRIMATI POONAM MAHAJAN:
SHRI G.M. SIDDESHWAR:

Will the PRIME MINISTER be pleased to state:

- (a) whether it is a fact that the nuclear energy is the cheapest source of energy as compared to other traditional sources of energy;
- (b) if so, the number of nuclear power plants which are generating energy in the country and comparative power generated by each of them;
- (c) whether it is also a fact that there are incidents leading to risk to human lives has occurred during the last five years;
- (d) if so, the details thereof and the reasons therefor; and
- (e) the details of the proper safeguards that are in place in each of the power plants?

ANSWER

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

- (a) Tariffs of electricity generated by nuclear power are comparable to those of contemporary conventional base load generators like thermal power.
- (b) The present installed nuclear power capacity comprises of 23 reactors with a total capacity of 7480 MW. The details are given in *Annexure*.
- (c)&(d) There has been no such incident due to operation of Nuclear Power Plants in the last five years.

(e) 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 provide fail-safe design features following a defence-in-depth approach. This ensures that there are multiple barriers between the source of radioactivity and the environment.

The operations are performed adopting well laid out procedures by highly qualified, trained and licensed personnel. Appropriate Personal Protection Equipment and monitoring aids are provided to all the personnel working in the nuclear power plants.

Annexure

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
		KAPS-3	700
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, RAPS-3 & MAPS-1 are presently under project mode.