GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO-490
ANSWERED ON 04/12/2025

FUNCTIONING OF NUCLEAR PLANTS

490. SHRI S. SELVAGANABATHY

Will the PRIME MINISTER be pleased to state:-

(a) the details of all the nuclear plants in the country, including the present age of each nuclear plant;
(b) the details of multi-safety mechanism being implemented by the Nuclear Power Corporation of India Ltd. (NPCIL) along with the periodic safety reviews undertaken for all nuclear reactors, as per the requirements of Atomic Energy Regulatory Board (AERB); and
(c) the current status of new nuclear power plants in the country;

ANSWER

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

(a) The details are attached as **Annexure**.

(b) 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 (Atomic Energy Regulatory Board- 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 providing assurance of safety.

All NPPs are required to undergo a comprehensive Periodic Safety Review (PSR) as per AERB requirements every 10 years. During PSR, the safety of the plant is assessed considering cumulative effects of ageing, plant modifications, operating experience as well as comparison with the current safety standards/ practices, and necessary upgrades are identified. License for operating reactors is renewed for further operation after exhaustive review of PSR and approval by AERB. Based on these reviews and operating experience feedback, necessary upgrades are carried out and the nuclear power plants are maintained at state-of-the-art in terms of safety.

(c) At present, there are eight nuclear reactors with a total capacity of 6600 MW (including 500 MW PFBR by BHAVINI) at various stages of construction. In addition, ten reactors of 700 MW are under pre-project activities.

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Annexure

Reactor & Location	Capacity (MW)	Age (Years) as on Nov 2025
TAPS-1 Tarapur, Maharashtra	160	56.1
TAPS-2 Tarapur, Maharashtra	160	56.1
RAPS-1 Rawatbhata, Rajasthan	100	51.9
RAPS-2 Rawatbhata, Rajasthan	200	44.6
MAPS-1 Kalpakkam, Tamilnadu	220	41.8
MAPS-2 Kalpakkam, Tamilnadu	220	39.7
NAPS-1 Narora, Uttar Pradesh	220	34.9
NAPS-2 Narora, Uttar Pradesh	220	33.4
KAPS-1 Kakrapar, Gujarat	220	32.5
KAPS-2 Kakrapar, Gujarat	220	30.2
KAIGA-2, Kaiga, Karnataka	220	25.7
RAPS-3 Rawatbhata, Rajasthan	220	25.5
KAIGA-1 Kaiga, Karnataka	220	25.0
RAPS-4 Rawatbhata, Rajasthan	220	24.9
TAPS-4 Tarapur, Maharashtra	540	20.2
TAPS-3 Tarapur, Maharashtra	540	19.3
Kaiga-3 Kaiga, Karnataka	220	18.5
RAPS-5 Rawatbhata, Rajasthan	220	15.8
RAPS-6 Rawatbhata, Rajasthan	220	15.6
Kaiga-4 Kaiga, Karnataka	220	14.8
KKNPP-1, Kudankulam, Tamilnadu	1000	10.9
KKNPP-2, Kudankulam, Tamilnadu	1000	8.6
KAPS-3, Kakrapar, Gujarat	700	2.4
KAPS-4, Kakrapar, Gujarat	700	1.6
RAPS-7 Rawatbhata, Rajasthan	700	0.6

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