GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO-1913
ANSWERED ON 11/02/2026

NUCLEAR POWER PLANTS

1913. SHRI RAJESH RANJAN

Will the PRIME MINISTER be pleased to state:-

(a) the details of the total number of nuclear power plants operational as on date and their total installed capacity;
(b) the details of the road-map of the Government for increasing nuclear power production from 2030 to 2047;
(c) whether India has made any significant progress in regard to commercialisation of thorium-based nuclear energy, and if so, the details thereof; and
(d) whether the Government proposes to set up a nuclear research or training institutions in backward regions of the country such as Bihar and Eastern India and if so, the details thereof?

ANSWER

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

(a) Presently, there are 24 nuclear power plants (excluding RAPS-1) in commercial operation in the country with a total capacity of 8,780 MW.

(b) The Government has drawn up a roadmap for reaching the 100 GW nuclear power capacity by 2047 as announced in the Nuclear Energy Mission. As per the roadmap, the present nuclear power capacity of 8.78 GW (excluding RAPS-1) is expected to reach about 22 GW by 2031-32 on progressive completion of projects presently at various stages of implementation. Another 32 GW of nuclear power capacity is envisaged to be set up beyond 2032 by NPCIL, comprising of indigenous Pressurised Heavy Water Reactors (PHWR) and Light Water Reactors (LWR) by 2047 taking the capacity to about 54 GW. As per the roadmap, the balance of 46 GW is expected to be set up by other Public Sector Enterprises (Central & State), State Governments, Private sector and Joint Ventures in different business models, comprising of reactors of different technologies.

BHAVINI is currently commissioning a 500 MWe Prototype Fast Breeder Reactor (PFBR) project at Kalpakkam, Tamil Nadu. Government has accorded approval to carry

out pre-project activities for 2 x 500 MWe twin unit of FBR 1&2 project at Kalpakkam, Tamil Nadu. On attaining first criticality of PFBR, Government will be approached for financial sanction of FBR 1 & 2 projects.

(c) The Department of Atomic Energy is in the process of development of a small demonstration molten salt reactor aimed to demonstrate the technologies required for the efficient utilisation of thorium. R&D on development and qualification of special materials, molten fluoride salt chemistry, component development is in progress for molten salt demonstration reactor. Commercial operation of a higher power version of this reactor will be taken up on successful operation of this demonstration reactor.

(d) A nuclear research and development centre is being established at Vizag, Andhra Pradesh.

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