GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO-1284
ANSWERED ON 31/07/2025

NUCLEAR ENERGY EXPANSION

1284. SHRI AYODHYA RAMI REDDY ALLA

Will the PRIME MINISTER be pleased to state:-

(a) the manner in which nuclear energy can be leveraged as a low-carbon energy source to contribute to India's climate change mitigation efforts, and the role it plays in reducing greenhouse gas emissions and meeting international climate commitments; and

(b) the details of annual growth rate in nuclear energy capacity that India needs to achieve to reach its target of 35-40 GW by 2035 and 100 GW by 2047, and the strategies adopted to meet this growth rate?

ANSWER

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

(a) Nuclear power is a clean, base load source of electricity available 24X7. Its lifecycle Green House Gas (GHG) emissions are comparable to those of renewables like hydro and wind. Nuclear power has huge potential and can provide the country long term energy security in a sustainable manner. These credentials make nuclear power a prominent candidate along with other clean sources in not only meeting the country's large energy demand but also the large energy transition to clean sources towards achievement of the goal of Net Zero by 2070.

(b) Presently, the installed nuclear power capacity in the country is 8780 MW (excluding RAPS-1 (100 MW) under extended shutdown). In addition, a total capacity of 13600 MW (including 500 MW PFBR being implemented by BHAVINI) is under different stages of implementation. On its progressive completion, the installed nuclear power capacity is expected to reach 22380 MW (excluding RAPS-1 - 100 MW) by 2031-32. The Government has announced an ambitious Nuclear Energy mission with a target of reaching a nuclear power capacity of 100 GW by 2047 and measures for enabling R&D in SMRs and new advanced technologies. The target of 100 GW by 2047 is planned to be achieved by deploying reactors based on existing and new advanced technologies, both in public and private sector.

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