

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO-490
ANSWERED ON 03/12/2025

NUCLEAR MISSION

490. ADV. GOWAAL KAGADA PADAVI
DR. PRASHANT YADAORAO PADOLE

Will the PRIME MINISTER be pleased to state:-

- (a) whether the Government has launched the 'Nuclear Mission' in the Union Budget 2025-26 with an allocation of Rs. 20,000 crore for R&D in Small Modular Reactors (SMRs) targeting at least five indigenously designed operational SMRs by 2033 and if so, the details thereof;
- (b) the number of SMR projects which have been sanctioned so far and the quantum of funds released during the current year;
- (c) whether any of these SMR projects are proposed to be located in Maharashtra or nearby regions including in tribal or backward districts and if so, the details thereof;
- (d) the steps taken/being taken to streamline regulatory clearances, land and utility access for SMR deployment in remote/underserved areas;
- (e) the manner in which the Government plans to integrate these SMRs into the national-grid and coordinate with the Ministry of Power and State Governments on grid-connectivity and local employment; and
- (f) the timeline by which the first indigenously designed SMR is expected to achieve grid-connection and the monitoring framework for its performance?

ANSWER

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

- (a) & (b) Yes, Under the Nuclear Energy Mission announced in the Union Budget 2025-26, a total budgetary provision of ₹20,000 crore has been made for the design, development, and deployment of Small Modular Reactors (SMRs). This allocation is aimed at supporting India's objective of developing and operationalizing at least five indigenously designed SMRs by 2033.

As part of this initiative, BARC has already undertaken design and development work on SMRs namely,

1. 200 MWe Bharat Small Modular Reactor (BSMR-200),
2. 55 MWe Small Modular Reactor (SMR-55), and
3. Up to 5 MWth High temperature gas cooled reactor meant for hydrogen generation.

BSMR-200 is in advanced stage of obtaining financial and administrative sanction.

- (c) & (d) BSMR-200 and SMR-55 are proposed to be constructed at DAE site located at Tarapur, Dist. Palghar, Maharashtra. The proposed site for demonstration reactor is not a remote / underserved areas.
- (e) These plants have to be taken as captive power plants in energy intensive sectors. Indigenous efforts for construction of small modular reactor are likely to create employment for skilled and unskilled manpower for construction, fabrication, installation and commissioning activities at SMRs sites. Subsequently manpower will be required to support operation & maintenance of SMRs which is likely to engage locals in sustained manner.
- (f) The lead units of indigenous SMRs are expected to be operational in 60 to 72 months after receipt of administrative and financial sanctions. Proposed SMRs are demonstration units. Its performance will be monitored continuously by designers / regulators for further improvements
