

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO-812
ANSWERED ON 04.02.2026

COMPREHENSIVE SECURITY REVIEWS

812. DR. RAJKUMAR SANGWAN

Will the PRIME MINISTER be pleased to state:-

- (a) whether the Government is carrying out a comprehensive security review of security projects/arrangements related to existing and under construction/proposed nuclear power plants in the country in the context of current global security challenges, rising geopolitical tensions and cyber threats;
- (b) if so, the details of the funds/percentage spent on safety testing, risk assessment, cyber security, emergency preparedness and compliance with regulatory standards out of the expenditure incurred/proposed for research, design and deployment of Small Modular Reactors (SMRs) during the last three years, year and project-wise; and
- (c) the details of the Government's comprehensive action plan, timelines and progress/achievements made so far for safety upgradation of old nuclear plants and strengthening of the national nuclear security framework including physical security, cyber security and disaster management in view of security concerns and the steps taken to complete the pending works?

ANSWER

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

(a) to (c) Considering the prevailing security scenario and threat perceptions, MHA has categorized DAE's vital installations into four categories as "A to D" on the basis of sensitivity. Security audit of these installations are carried out by IB/MHA as per the periodicity prescribed for each category. Recommendations are implemented considering the suitability and feasibility. All operating nuclear power plants in the country are under security cover of Central Industrial Security Force (CISF) and integrated security systems including Electronic Surveillance Systems and Access Control mechanisms are in place to deter security breach.

Department of Atomic Energy is working on the design and development of several types of reactors. In the context of current global security challenges, rising geopolitical tensions and cyber threats, the department has incorporated several best practices in the design of all its reactors, which will also apply to design and development of future reactors including SMRs. The safety and security critical systems are designed and

developed in-house using custom built hardware and software which are subjected to regulatory verification and validation, thereby making them resistant to cyber security threats. The safety and security critical infrastructure of Indian nuclear establishments, such as control network and safety systems of plants are isolated from Internet and the local IT network.

Department of Atomic Energy has specialist groups like Computer and Information Security Advisory Group (CISAG) to look after cyber security/information security of DAE units. These groups undertake the process of strengthening cyber security of all units under DAE including nuclear facilities through hardening of systems and audits. With respect to nuclear security, AERB regulates those engineering aspects of nuclear security which have a bearing on safety, within the main plant boundary of Nuclear Power Plant (NPP), as per requirements specified in the AERB document titled “Nuclear Security Requirements for Nuclear Power Plants”. AERB carries out the regulatory review for the operation and maintenance of nuclear security systems within main plant boundary including Operating Island, Vital / Inner areas and Central Alarm Station. AERB ensures that the operating NPPs comply with the nuclear security requirements specified in this document and same is being verified during periodic regulatory inspections of NPPs.

Well established SOPs for disaster management are in place which are periodically reviewed by National Agencies. For existing nuclear power plants, periodic emergency exercises are jointly conducted by local authority, NPP operator, AERB and DAE in coordination with National Disaster Management Authority (NDMA) to test the off-site emergency preparedness and Response Plan and District Disaster Management Plan. Comprehensive review of security arrangement has been carried out during such exercises along with the review of safety and emergency preparedness.
