

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.2472
TO BE ANSWERED ON 16.03.2022

SAFETY AT NUCLEAR PLANTS

2472. SHRI E.T. MOHAMMED BASHEER:

Will the PRIME MINISTER be pleased to state:

- (a) whether the Government has formulated any action plan to ensure Nuclear and Radiation safety and Nuclear Security including safety upgradation of old Nuclear Plants; and
- (b) if so, the details thereof?

ANSWER

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

(a)&(b) Highest priority is accorded to safety in all aspects of nuclear power viz. siting, design, construction, commissioning, and operation. Nuclear power plants are designed adopting safety principles of redundancy, diversity and provide fail-safe design features following a defence-in-depth approach. This ensures that there are multiple barriers between the source of radioactivity and the environment. The operations are performed adopting well laid out procedures by highly qualified, trained and licensed personnel. Appropriate Personal Protection Equipment and monitoring aids are provided to all the personnel working in the nuclear power plants.

A multi-tier safety mechanism within Nuclear Power Corporation of India Limited (NPCIL) by the regulatory authority Atomic Energy Regulatory Board (AERB) is in place. All NPPs are required to undergo a comprehensive Periodic Safety Review (PSR) every ten years as per AERB requirements. 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. 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. The PSR process ensures that all NPPs continue to be compliant with current safety requirements and do not pose any danger to public and environment.

Adequate measures are taken to ensure the security of nuclear power plants. 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. These systems are subjected to periodic audits & reviews and necessary upgrades are carried out based on the reviews and various inputs received from the central and state security agencies.
