

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO.511**  
TO BE ANSWERED ON 05.02.2020

**NUCLEAR ACCIDENTS**

511. SHRIMATI MEENAKASHI LEKHI:

Will the Prime Minister be pleased to state the details of the precautionary steps being taken to minimise risk factors associated with nuclear accidents?

**ANSWER**

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

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Department of Atomic Energy (DAE) has been successfully operating all its nuclear facilities for the past six decades by ensuring radiological safety both to its workforce and every member of public. Nuclear Power Plants(NPP) are designed adopting safety principles of redundancy, diversity and provided fail-safe design features following a defence-in-depth approach which ensures multiple layers of safety to minimize the probability of any accident and quantity of release to the environment in case of a hypothetical accident. Additionally, DAE has a rugged regulatory mechanism to monitor design, manufacturing, installation, commissioning and operation of nuclear facilities. Emergency preparedness is established to reduce the consequences through quick impact assessment and implementation of counter measures. Beyond this, even for extremely unlikely very low probable event having potential for off-site release, Emergency Preparedness Plans (EPPs) are put in place at all NPPs before the start of operation as additional precautionary measure to further reduce the risk. These EPPs are tested through periodic exercises to confirm the decision making capabilities, response timeline, co-ordination among response agencies and availability of necessary resources.

The operations are performed adopting well laid out procedures by highly qualified, trained and licensed personnel. Appropriate Personal Protection Equipments and monitoring aids are provided to all the personnel working in the nuclear power plants. The safety of nuclear power plants is continuously monitored and reviewed by the Atomic Energy Regulatory Board (AERB).

Subsequent to Disaster Management Act, 2005 and formation of National Disaster Management Authority (NDMA), the plan for implementing response actions in public domain is further strengthened. The Department of Atomic Energy (DAE) has also set up Emergency Response Centres (DAE-ERCs) at various DAE units, which are operational round the clock, to support and coordinate emergency response actions.

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