

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:1558
ANSWERED ON:04.03.2015
MISHAPS IN ATOMIC PLANTS
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Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the incidents of mishaps in atomic energy plants in the country during the last three years, State-wise;
- (b) whether any assessment has been made to ascertain the nature and causes of such mishaps and if so, the details thereof; and
- (c) the details of safety measures taken to prevent such mishaps in future?

Answer

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

(a)&(b) No mishap has taken place in any of the Nuclear Power Plant (NPP) in the country in the last three years. Incidents at NPP occurring during operation are categorised as per the International Nuclear Event Scale (INES) of International Atomic Energy Agency (IAEA) in accordance with their safety significance. In this scale, events are classified at seven levels. The lower levels (1-3) are termed as 'Anomaly /incidents', and the upper levels (4-7) as 'Accidents'.

In the last 3 years, no NPP had any incident exceeding level-1 (Anomaly related to minor problems) and most of the incidents were rated at level 0 indicating no impact on safety. In fact, in the entire history of NPP operation in India, there has been only one event at Level 3 which was the fire incident in the turbine generator building of Narora Atomic Power Station during the year 1993. Even in that incident there were no radiological consequences or physical injury.

(c) At all nuclear power stations, state of the art safety measures are provided based on principles of redundancy (more numbers than required) and diversity (safety systems operating on different principles). These include fail safe shutdown system to safely shutdown the reactor, combination of active (requiring external intervention) and passive (systems working on natural phenomena and not needing motive power or operator action), cooling systems to remove the heat from the core at all times and a robust containment to prevent release of radioactivity in all situations. In addition, all nuclear power plants are designed to withstand extreme natural events like earthquake, flooding, tsunami etc.