

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

STARRED QUESTION NO:233
ANSWERED ON:23.07.2014
SAFETY REVIEW OF ATOMIC POWER PLANTS
Nimmala Shri Kristappa

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether safety standards of various atomic power plants have been reviewed by the International Atomic Energy Agency (IAEA);
- (b) if so, the details thereof along with the deficiencies, if any, noticed and suggestions / recommendations made by the Agency to further enhance/ improve safety and maintenance of plants; and
- (c) the follow-up action taken by the Government thereon?

Answer

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

- (a) to (c) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO.233 FOR ANSWER ON 23.07.2014 BY SHRI NIMMALA KRISTAPPA REGARDING SAFETY REVIEW OF ATOMIC POWER PLANTS.

(a) The safety review of units 3&4 of Rajasthan Atomic Power Station (RAPS-3&4) at Rawatbhata in Rajasthan was carried out by the Operational Safety Review Team (OSART) of the International Atomic Energy Agency (IAEA) during October 29 to November 14, 2012. This was followed by a 'follow up review' during February 03 – 07, 2014.

(b)&(c) An in-depth safety review was carried out by OSART OF IAEA, for the first time in the country, by a team of experts from eight countries namely Canada, Belgium, Finland, Germany, Romania, Slovakia, Slovenia and Sweden in addition to experts of the IAEA. On completion of the review, following key findings were reported by the team.

Good Practices

The plant management and staff at RAPS-3&4 were very open during the review and discussions. The OSART mission identified thirteen good practices at the station, to be shared in due course by the IAEA with the global nuclear industry. The important ones are:

The power plant's safety culture cultivates a constructive work environment and a sense of accountability among the plant personnel, and gives it's staff the opportunity to expand skills and training,

The power plant's Public Awareness Programme provides educational opportunities to the local community about nuclear and radiation safety,

The power plant has a Management of Training and Authorisation System for effective management of training activities,

The power plant uses testing facilities and mockups to improve quality of maintenance work and to reduce radiation doses.

Recommendations of OSART

The OSART team made seven recommendations / suggestions related to areas where the operation of the units could be further reinforced. Some of them are :

The plant should enhance actions to maintain electrical cable conditions at a high standard;

The fire doors inspection and maintenance programme should be enhanced to identify and correct fire door function;

Certain aspects of the plant's surveillance testing programme should be further enhanced; and

The plant should enhance root cause analyses to systematically identify all learning opportunities.

Suggestion made by the OSART Team

The OSART team also made seven suggestions to the station. These are.:

To use specific departmental performance indicators,

Strengthen programme to identify deficiencies in the field,

Strengthen effectiveness of Operational Experience (OE) programme,

Review of programme for follow up of compliance,

Supplementary measurements for assessment of chemistry performance indicator,

Introduction of supplementary criteria for nuclear resin performance and evaluation of severe accident mitigation measures.

All the recommendations and suggestions were analysed in detail and appropriate actions have been implemented in Rajasthan Atomic Power Station Units-3&4 (RAPS-3&4) and also in similar Units operated by Nuclear Power Corporation of India Ltd.

Follow up Review

During February 03-07, 2014 a follow up review for verification of the progress made in addressing the recommendations was conducted by OSART of IAEA. The team acknowledged that significant progress was made in addressing the recommendations and suggestions made earlier in the first review by the team, and that the corrective actions in some cases covered a much broader scope than was intended in the OSART recommendations and suggestions.