

Safety measures for the Jaitapur Nuclear Plant

3877. SHRI P. RAJEEVE: Will the PRIME MINISTER be pleased to state:

- (a) whether the reactors which will be used for Jaitapur atomic plant have been operationalised anywhere in the World;
- (b) if so, the details thereof;
- (c) if not, whether any safety measures have been ensured; and
- (d) if so, the details thereof?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) and (b) The nuclear power reactors planned at Jaitapur site are Evolutionary Pressurised Water Reactors (EPRS). These have evolved from the proven design, safety principles and manufacturing technologies employed in 'N4' reactors in France and 'KONVOI' nuclear power reactors in Germany which are in safe operation for last several years. Currently, EPRs are under construction in Finland, France and China. These will be operational in 2 to 4 years and their operational feedback will also be available for reactors to be set up at Jaitapur.

(c) and (d) The EPRs are Generation III+ reactors employing advanced safety features. Safety of the EPRs has been reviewed by the regulatory authorities in Finland, France and China where these reactors are in different stages of construction. The safety aspects of the reactors are reviewed and stage-wise clearances accorded by the Atomic Energy Regulatory Board (AERB) for every stage of implementation.

Safety of nuclear energy

3878. SHRI T.M. SELVAGANAPATHI: Will the PRIME MINISTER be pleased to state:

- (a) whether there is a great need to enhance per capita consumption of nuclear energy in the country and the little use at present is mainly because of non-availability of this crucial energy;
- (b) if so, the steps taken by Government in this regard;
- (c) whether the total share of nuclear energy in total energy stock is 3.8 per cent;

(d) if so, whether Government has taken any action plan to improve the situation;

(e) whether one of the reasons for low production of the nuclear energy in India is because of the fear attached to it; and

(f) if so, the steps taken by Government to convince all about the safety of nuclear energy?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) There is a need to increase the per capita consumption of electricity to spur economic growth in the country. Nuclear energy is a clean source of electricity generation which has huge potential and needs to be deployed in addition to other sources of electricity to meet growing demand of electricity in the country.

(b) The Government has taken steps to augment nuclear energy generation by setting up nuclear power reactors based on indigenous technology and also with foreign technical cooperation.

(c) The share of nuclear energy in the total electricity generation in the country was about 3.6% in the year 2012-13.

(d) The low share of nuclear power is on account of low installed capacity base, which is currently 4780 MW out of the total installed capacity of 223344 MW in the country. The present nuclear power installed capacity will reach to 10,080 MW by 2017 on progressive completion of projects under construction. The Twelfth Five Year Plan proposals envisage start of work on new projects totaling to 17400 MW capacity. More nuclear power plants are planned to increase the nuclear power capacity in future.

(e) and (f) The Fukushima accident in Japan led to apprehensions about safety of nuclear power in some sections of the people. A massive public outreach programme has been undertaken, adopting a multi-pronged approach, to reach out to all sections of the society and allay the apprehensions about the safety of nuclear power and all related issues in a credible manner.

Safety measures in Kudankulam Nuclear Power Plant

3879. SHRI T.K. RANGARAJAN: Will the PRIME MINISTER be pleased to state:

(a) the additional safety measures incorporated in Kudankulam Nuclear Power Plant;