

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO.316
TO BE ANSWERED ON 15.03.2012

SETTING UP OF NUCLEAR PLANTS IN ELEVENTH/TWELFTH PLANS

316. DR. T. SUBBARAMI REDDY:

Will the PRIME MINISTER be pleased to state:

- (a) the number of nuclear power projects set up/proposed to be set up in the country during the Eleventh and Twelfth Plans, State-wise;
- (b) the total estimated cost of each project, its capacity and the time-frame for commissioning of the proposed power stations; and
- (c) the various safeguards taken or proposed to be taken in the installation and operation of these projects?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY):

(a)&(b) The projects completed in XI Five Year Plan/ expected to be completed in XII Five Year Plan with requisite details are listed below:-

Project	Location & State	Capacity (MW)	Approved cost Rs. in crore	Expected completion
Kaiga 3&4	Kaiga, Karnataka	2 x 220	3282.00	Completed
RAPP 5&6	Rawatbhata, Rajasthan	2 x 220	3072.00	Completed
KKNPP 1&2	Kudankulam, Tamilnadu	2 x 1000	13171.00 *	Completion was expected in 2011-12. But the project is delayed due to agitation.
PFBR	Kalpakkam, Tamilnadu	500	3492.00*	2014-15
KAPP 3&4	Kakrapar, Gujarat	2 x 700	11459.00	2015-16
RAPP 7&8	Rawatbhata, Rajasthan	2 x 700	12320.00	2016-17

* Under Revision.

Work on new nuclear power projects and pre-project activities are planned in the XII Plan as per the following details:

Project	Location	Capacity (MW)
Gorakhpur 1&2	Gorakhpur, Haryana	2 x 700
Chutka, 1&2	Chutka, Madhya Pradesh	2 x 700
Mahi Banswara, 1&2	Mahi Banswara, Rajasthan	2 x 700
Kaiga, 5&6	Kaiga, Karnataka	2 x 700
Kudankulam, 3&4	Kudankulam, Tamilnadu	2 x 1000
Jaitapur, 1&2	Jaitapur, Maharashtra	2 x 1650
Kovvada, 1&2	Kovvada, Andhra Pradesh	2 x 1500
Chhaya Mithi Virdi, 1&2	Chhaya Mithi Virdi, Gujarat	2 x 1100
FBR 1&2	Kalpakkam, Tamilnadu	2 x 500
Advanced Heavy Water Reactor (AHWR)	Location to be decided	300

These projects are expected to be completed in the XIII Five Year Plan / early XIV Five Year Plan depending on their actual start dates. Their cost estimates will be evolved as the project proposals are finalized. Pre-project activities are also planned at Bhimpur in Madhya Pradesh (4 x 700) and Haripur in West Bengal (6 x 1000 MW).

- (c) Safety is accorded utmost priority in all aspects of nuclear power plants. At each stage of the plant like siting, construction, equipment erection, commissioning and operation, safety is reviewed and authorization accorded by the Atomic Energy Regulatory Board (AERB).

The reactors of indigenous design – Pressurised Heavy Water Reactors (PHWRs) and Fast Breeder Reactors (FBRs) follow the latest safety standards prescribed by the International Atomic Energy Agency (IAEA), which are regulated by the AERB. In respect of Light Water Reactors (LWRs) set up in technical cooperation with foreign countries, safety requirements of regulatory body of the vendor country as well as Indian regulatory body, i.e. AERB are to be satisfied. The AERB independently reviews and accords stage-wise clearance / approvals for setting up reactors in India. Post Fukushima, (Japan) incident, safety of the Indian nuclear power plants has been reviewed by task forces of Nuclear Power Corporation of India Limited (NPCIL) and the AERB. The reviews found that the plants are safe and have margins and features to withstand extreme natural events such as Tsunami, Earthquake etc.,