

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:676
ANSWERED ON:26.11.2014
ATOMIC ENERGY PRODUCTION
Meghwal Shri Arjun Ram

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the quantum of Atomic Energy Production in the country at present;
- (b) the details of long term and short term plans to increase the production of atomic energy; and
- (c) the details of security threats in the field of atomic power outlined by different countries and the measures taken by the Government in this regard?

Answer

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

(a) The country's present installed nuclear power capacity in commercial domain, comprising twenty nuclear power reactors, is 4780 MW. In addition, Unit-1 of Kudankulam in Tamil Nadu with a capacity of 1000 MW was connected to grid in October 2013.

(b) At present one reactor (Unit-2 of Kudankulam) with a capacity of 1000 MW is under commissioning, and five reactors with a capacity of 3300 MW are at various stages of construction. The details of these reactors are as under:

UNITS	Location & State	Capacity (MW)
Kakrapar Atomic Power Station-3	Kakrapar, Gujarat	700
Kakrapar Atomic Power Station-4		700
Rajasthan Atomic Power Station -7	Rawatbhata, Rajasthan	700
Rajasthan Atomic Power Station -8		700
Prototype Fast Breeder Reactor	Kalpakkam, Tamil Nadu	500

These are expected to be completed by the end of XII Five Year Plan/beginning of XIII Five Year Plan.

The XII Five Year Plan proposals envisage start of work on nineteen new reactors with the total capacity of 17400 MW. The details of the projects are as under:

Project	Location	Capacity (MW)
Indigenous Reactors		
Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP 1&2)	Gorakhpur, Haryana	2 x 700
Chutka Madhya Pradesh Atomic Power Project (CMPAPP 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
Fast Breeder Reactor (FBR 1&2)	Kalpakkam, Tamil Nadu	2 x 500
Advanced Heavy Water Reactor (AHWR)	Location to be decided	300
Reactors with Foreign Cooperation		
Kudankulam Nuclear Power Project (KKNPP 3&4)	Kudankulam, Tamil Nadu	2 x 1000
Jaitapur Nuclear Power Project (JNPP 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

These are expected to be progressively completed in the XIII/XIV Five Year Plan. More reactors are also planned to be set up in the future.

(c) Atomic Energy Regulatory Board (AERB) has issued a manual on Nuclear Security requirements for nuclear power plants. This manual gives a detailed requirement on nuclear security in nuclear power plants and the same is followed in various nuclear power plants in the country. The AERB manual on Nuclear Security requirements for Nuclear Power Plants is based on the IAEA guidelines and are in line with international practice. In addition, Manual for DAE security provides overall philosophy of security in the department and prescribes the principles and procedures governing the functioning of the security units. A system of regular

interaction with various intelligence agencies of the country for sharing information on recent threats and counter measures is also in place.