

(c) All nuclear installations in India are designed and operated following a defence in depth philosophy. Inherently safe and highly reliable designs are supplemented with control and protection features to detect any deviation in plant safety parameters and restore the same to normal plant state. In case of any event, these features will ensure safe shut-down of reactor and mitigating the radiological consequences with containment as the final barrier to contain the radioactivity. In case of highly unlikely events leading to release of radioactivity, Emergency Preparedness and Response (EPR) plans are in place to protect the public. Trained Emergency Response Teams are available with Department of Atomic Energy's 23 Emergency Response Centres and the trained National Disaster Response Force teams will be able to help the authorities in the implementation of counter-measures and protection to people.

(d) All the units of DAE have Information Security Policy/Cyber Security Policy based on ISO 27000 standards. The salient features of policy are - Critical infrastructure of DAE is subjected to strict security requirements. All critical systems of Indian nuclear establishment's plant control systems/electronic systems are designed and developed in-house using custom built hardware and software which are subjected to regulatory verification and validation, thereby making them immune to cyber security threats. Critical infrastructure of Indian nuclear establishment is isolated from Internet and access to such systems is restricted to authorized personnel and closely monitored.

Department of Atomic Energy has specialist groups like Computer and Information Security Advisory Group (CISAG) and Task force for Instrumentation and Control Security (TAFICS) to look after cyber security/information security of DAE units including regular cyber security audit.

Negotiations for supply of nuclear fuel

†484. SHRI MAHENDRA SINGH MAHRA: Will the PRIME MINISTER be pleased to state:

(a) whether Government is proposing to set up atomic power stations to meet the shortage of power in the country;

(b) if so, the States and the locations of such power stations where these would be set up;

†Original notice of the question was received in Hindi.

(c) the countries with whom negotiations for supply of fuel for these stations have been held; and

(d) the time by when these stations would be set up?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) Yes, Sir.

(b) Presently, following nuclear power projects are under various stages of construction:

Project	Location & State	Capacity(MW)
KAPP-3&4	Kakrapar, Gujarat	2x700
RAPP-7&8	Rawatbhata, Rajasthan	2X700
KKNPP-3&4	Kudankulam, Tamil Nadu	2 X 1000
PFBR	Kalpakkam, Tamil Nadu	500
GHAVP 1 & 2	Gorakhpur, Haryana	2 x 700

In addition, following nuclear power projects have been accorded financial sanction and administrative approval by the Government:

Project	Location & State	Capacity(MW)
Projects Accorded Administrative Approval & Financial Sanction		
GHAVP-3&4@	Gorakhpur, Haryana	2X700
Kaiga-5&6	Kaiga, Karnataka	2X700
Chutka-1&2	Chutka, Madhya Pradesh	2X700
Mahi Banswara-1 to 4	Mahi Banswara, Rajasthan	4X700
KKNPP-5&6	Kudankulam, Tamil Nadu	2 X 1000

@ Work has commenced at GHAVP-1&2

The Government has also accorded 'In principle' approval of the following sites for setting up nuclear power plants in future.

 Sites Accorded 'In-Principle' Approval

Bhimpur, Units-1 to 4	Bhimpur, Madhya Pradesh	4X700
Jaitapur, Units-1 to 6	Jaitapur, Maharashtra	6 x 1650
Kovvada, Units - 1 to 6	Kovvada, Andhra Pradesh	6 x1208
Chhaya Mithi Viridi, Units - 1 to 6	Chhaya Mithi Viridi, Gujarat	6x1000*
Haripur, Units - 1 to 6	Haripur, West Bengal	6x1000*

* Nominal Capacity

Currently, pre-project activities at these sites have commenced.

(c) Negotiation meetings for supply of fuel were held with various firms of Australia, Russia, Kazakhstan and Canada.

(d) The approved projects are expected to be progressively completed by the year 2031.

Global Centre for Nuclear Energy Partnership

485. SHRI P. BHATTACHARYA: Will the PRIME MINISTER be pleased to state:

(a) whether India has made any progress towards setting up a Global Centre for Nuclear Energy Partnership in the country;

(b) if so, the details thereof;

(c) whether India is in consultation with expected members of partnering countries to set up the centre; and

(d) if so, the details thereof including the number of countries which have agreed to participate in it?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) Yes, Sir.

(b) Project for setting up of the Global Centre for Nuclear Energy Partnership (GCNEP) in India was sanctioned during September, 2010 with a proposal for construction in phases. The construction activities of Phase-I buildings have been completed and the construction activities for the next phase is being taken up. The facility is operational in the buildings completed in Phase-I.