

**GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO : 5326
TO BE ANSWERED ON 28/04/2010**

FAST BREEDER REACTORS

5326 SHRI ANAND PRAKASH PARANJPE:

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) whether India's first Fast Breeder Reactor (FBR) for commercial nuclear energy generation is likely to be delayed;
- (b) if so, the reasons for the delay; and
- (c) the time by which this will be made operational?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) Yes Sir, it is likely to be delayed by about one year.
- (b) Due to tsunami in December 2004, the raft which support the civil structures got severely affected and needed to be reconstructed. Also, the Indian industries carried out a number of mock up both on civil and mechanical works so as to meet the stringent technical specifications with confidence. Many of the activities of PFBR construction are first of a kind for the industries.
- (c) The commissioning is likely to start by March 2012.

**GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO : 5373
TO BE ANSWERED ON 28/04/2010**

SETTING UP TACTIC AND MYSTIQUE TELESCOPES

5373 SHRI PURNMASI RAM:

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) whether despite an expenditure of Rs.16.18 crore on setting up of TACTIC and MYSTIQUE telescopes by the Department of Atomic Energy, they have not been able to establish them so far;
- (b) if so, the reasons therefor; and
- (c) the reasons for shifting it from Mount Abu to Hanle, in Ladakh?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) & (b) No, Sir. The TACTIC telescope has been set up and upgraded at Mt. Abu. Useful data collected from galactic and extragalactic objects by the TACTIC telescopes has been published in high impact journals. The prototype MYSTIQUE comprising of an array of 30 detectors was installed during 1995-96 and operated with various configurations till 1999. Useful data on the polarization characteristics of the atmospheric Cherenkov events were collected during this period. Upgradation of MYSTIQUE was not taken up due to global developments in gamma-ray astronomy.
- (c) It was envisaged to set up four telescopes (TACTIC, MYSTIQUE, BEST and MACE) at one single location. However, on a review of the programme by a National Committee of experts, it was recommended to set up the large diameter MACE (Major Atmospheric Cherenkov Experiment) telescope at Hanle in the Ladakh region of J&K. The high altitude (4200m asl) and year round clear sky conditions at Hanle are the important considerations for change in the location.

**GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO : 5382
TO BE ANSWERED ON 28/04/2010**

CIVILIAN NUCLEAR AGREEMENTS

5382 SHRI M.I. SHANAVAS:

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) whether the Government has formally agreed to provide access to the International Atomic Energy Agency (IAEA) of its civilian nuclear reactors;
- (b) if so, the details thereof and the reasons therefor;
- (c) whether the IAEA can conduct inspection of the military facilities;
- (d) if so, the reaction of the Government thereto;
- (e) whether any hurdles are being faced in the implementation of civilian nuclear co-operation agreements with various countries;
- (f) if so, the details thereof; and
- (g) the details of the decisions arrived at during the last round of negotiations with USA on nuclear fuel reprocessing?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) & (b) In accordance with India's Separation Plan tabled in Parliament on 11.05.2006, 10 nuclear power reactors have so far been placed under safeguards under the agreement between the Government of India and International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities signed on 2 February 2009.
- (c) No Sir.

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- (d) Does not arise.
- (e) Agreements between India and various other countries on peaceful use of nuclear energy are to be implemented as per the agreed terms and no hurdles are foreseen in their implementation.
- (f) Does not arise.
- (g) Article 6(iii) of the Agreement for Cooperation between the Government of India and the Government of the United States of America concerning Peaceful Uses of Nuclear Energy, inter-alia, states that India agreed to establish a new national reprocessing facility dedicated to reprocessing safeguarded nuclear material under IAEA safeguards, Article 6(iii) of the agreement calls for consultations on arrangements and procedures within one year.

In March 2009 the US responded to India's request invoking Article 6 (iii) of the Indo-US Agreement on arrangements and procedures confirming that the first round of formal consultations, would commence no later than 3 August 2009 and that final agreement on arrangements and procedures is to be reached no later than 3 August 2010. The text has been finalized in the last round of negotiations held from 2-4 March 2010

**GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO : 5391
TO BE ANSWERED ON 28/04/2010**

SETTING UP OF NUCLEAR POWER PLANT

5391 SHRI BISHNU PADA RAY:

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) whether there is any proposal to set up a 250 MW Nuclear Power Plant on an island of Andaman and Nicobar Islands;
- (b) if so, the details thereof including the current status of the Plant; and
- (c) the time by which such plant is likely to be commissioned?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) No, Sir.
- (b) & (c) Does not arise.

**GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO : 5460
TO BE ANSWERED ON 28/04/2010**

NUCLEAR POWER PROJECT

**5460 SHRI JAGDISH SHARMA:
SHRIMATI SUPRIYA SULE:
SHRI KACHHADIA NARANBHAI:
SHRI M.B. RAJESH:
SHRIMATI RAMA DEVI:
SHRI PRADEEP MAJHI:**

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) the names of the countries with which agreements have been signed for setting up of nuclear power plants in the country after the approval of international community alongwith the locations identified for these plants including their capacity to generate power; and
- (b) the time by which these nuclear power plants are likely to commence the production?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) Consequent to the clearance of the Nuclear Suppliers Group (NSG), enabling intergovernmental agreements (IGA) outlining the framework of cooperation including setting up nuclear power reactors have been signed with Russian Federation, France and the USA. Commercial agreements for setting up of reactors are presently under discussion. The government has accorded 'in principle' approval of sites for setting up reactors in cooperation with foreign countries as follows:

: 2 :

Country	Sites Designated	Nominal Capacity (MW)
Russian Federation	Kudankulam, Tamilnadu	4 x 1000 *
	Haripur, West Bengal	6 x 1000
France	Jaitapur, Maharashtra	6 X 1650
United States of America	Kovvada, Andhra Pradesh	6 x 1000
	Chhaya Mithi Viridi, Gujarat	6 x 1000

* Additional capacity, 2 x 1000 MW capacity is already under construction at the site.

- (b) Pre-project activities are currently in progress at these sites. The planning is to start work on the first set of twin units at the above sites in 2012 subject to land acquisition. The commercial generation will start after 6 years from the first pour of concrete.

**GOVERNMENT OF INDIA
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LOK SABHA
UNSTARRED QUESTION NO : 5484
TO BE ANSWERED ON 28/04/2010**

NUCLEAR LIABILITY BILL

**5484 SHRI P.C. GADDIGOUDAR:
SHRIMATI JAYA PRADA:
SHRI ABDUL RAHMAN:**

WILL THE PRIME MINISTER BE PLEASED TO STATE:

- (a) whether the Government is considering to bring civil nuclear liability bill which will allow the foreign nuclear companies to set up nuclear reactors in India;
- (b) if so, the details thereof;
- (c) whether there is any provision for compensation to victims, if any, in case of nuclear accident;
- (d) if so, the details thereof; and
- (e) the time by which the proposed bill is likely to come into force?

ANSWER

**THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS.
(SHRI PRITHVIRAJ CHAVAN):**

- (a) The Government intends to introduce a Bill in the Lok Sabha to provide for civil liability for nuclear damage. The Atomic Energy Act, 1962 does not permit any foreign company to set up nuclear reactors in India. Nuclear power plants can only be set up either by the Central Government itself or through any authority or Corporation established by it or a Central Government Company.
- (b) The proposed legislation provides for prompt compensation to the victims of a nuclear incident. The Bill facilitates payment of compensation by enforcing no-fault liability on the operator of a nuclear installation. The Bill lays down the liability of the operator at rupees five

hundred crores per nuclear incident and a maximum amount of liability at rupee equivalent of three hundred million Special Drawing Rights (at present exchange rate Rs 2163 crores) for a nuclear incidence. It also empowers the Government to increase or decrease the amount of liability of the operator depending on the risk involved.

- (c) & (d) The Atomic Energy Act, 1962 does not address the issue of civil nuclear liability. The Public Liability Insurance Act, 1991 (enacted in the aftermath of the tragedy caused by an accident in Bhopal in 1984) is not applicable to nuclear incidents. Thus, at present there is no law to provide compensation to the victims of a nuclear incident.
- (e) The Bill will be enacted into a law after completing all required procedures. The Act will enter into force after the notification by the government.
