

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

STARRED QUESTION NO:25  
ANSWERED ON:23.02.2011  
SETTING UP OF NUCLEAR POWER PROJECTS  
Nirupam Shri Sanjay Brijkishorilal ;Rao Shri Nama Nageswara

**Will the Minister of ATOMIC ENERGY 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;
- (c) the various safeguards taken or proposed to be taken in the installation and operation of these projects;
- (d) whether the proposal to increase the power generation capacity of power station at Tarapur, Maharashtra is under consideration of the Government; and
- (e) if so, the details thereof?

**Answer**

THE MINISTER OF STATE FOR PARLIAMENTARY AFFAIRS, PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PMO (SHRI V. NARAYANASAMY) :

(a) to (e) A statement is laid on the Table of the House:

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 25 FOR ANSWER ON 23.02.2011 BY SHRI SANJAY BRIJKISHOR LAL NIRUPAM AND SHRI NAMA NAGESWARA RAO REGARDING SETTING UP OF NUCLEAR POWER PROJECTS.

(a) Two nuclear power projects, Kaiga 3&4 (2 x 220 MW) in Karnataka and RAPP 5&6 (2 x 220 MW) at Rawatbhata in Rajasthan have been completed so far in the XI Plan period. Two more projects Kudankulam, Units-1&2 (2 x 1000 MW) in Tamilnadu and a PFBR (500 MW) at Kalpakkam in Tamilnadu are at advanced stage of completion. The XI plan Mid-Term-Appraisal (MTA) envisages launch of four projects comprising of 2 x 700 MW indigenous Pressurized Heavy Water Reactors (PHWRs) at Kakrapar in Gujarat and Rawatbhata in Rajasthan, 2 x 1000 MW Light Water Reactors (LWRs) at Kudankulam in Tamilnadu and 2 x 1650 MW LWRs at Jaitapur in Maharashtra based on international cooperation. In addition, pre-project activities in respect of two projects each of 2 x 700 MW PHWRs in Haryana and Madhya Pradesh and three each of 2 x 1000 MW or larger size LWRs in Gujarat, Andhra Pradesh and West Bengal are envisaged. The detailed twelfth plan proposals are yet to be finalized.

(b) The details of the cost, capacity and time frame of the projects already launched in the XI Plan are :

| Project | Location | Capacity (MW) | Cost (`crore) | Completion | Scheduled |
|---------|----------|---------------|---------------|------------|-----------|
|---------|----------|---------------|---------------|------------|-----------|

|          |                       |         |       |  |         |
|----------|-----------------------|---------|-------|--|---------|
| KAPP 3&4 | Kakrapar, Gujarat     | 2 x 700 | 11459 |  | 2015-16 |
| RAPP 7&8 | Rawatbhata, Rajasthan | 2 x 700 | 12320 |  | 2016-17 |

The details of the capacity of projects where pre-project activities are in progress are:

| Location & State | To be set up in cooperation with | Capacity (MW) |
|------------------|----------------------------------|---------------|
|------------------|----------------------------------|---------------|

|                        |                    |          |
|------------------------|--------------------|----------|
| Gorakhpur, Haryana     | Indigenous         | 2 x 700  |
| Chutka, Madhya Pradesh |                    | 2 x 700  |
| Kudankulam, Tamilnadu  | Russian Federation | 2 x 1000 |
| Jaitapur, Maharashtra  | France             | 2 x 1650 |

Kovvada, Andhra Pradesh USA 2 x 1000#  
Chhaya Mithi Virdi, Gujarat USA 2 x 1000#  
Haripur, West Bengal Russian Federation 2 x 1000

#### # Nominal Capacity

The PHWR projects are expected to be completed in about six years from the start of work. The recently approved completion cost of the indigenous PHWR projects is about Rs.8.2 crore /MW. The time schedule and cost of projects proposed to be set up with international cooperation will depend on the business model finalized and will be known after the conclusion of Techno-Commercial contracts.

(c) The projects to be set up with international cooperation will be under IAEA safeguards. In respect of indigenous 700 MW PHWRs, a decision whether to place these under safeguards will be taken by the Government at an appropriate time.

(d) No, Sir.

(e) Does not arise.