

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

STARRED QUESTION NO:100
ANSWERED ON:11.12.2013
NUCLEAR POWER GENERATION
Ananth Kumar Shri

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the details of the projects for nuclear power generation proposed by the Government in the last two Five Year Plans along with the success achieved in this regard and the names and sites where such projects have been commissioned/are pending during the said period;
- (b) the total power generation achieved/ expected to be generated by these projects;
- (c) the total number of nuclear power projects pending for approval from the Government, State-wise; and
- (d) the reasons for the pendency, project-wise?

Answer

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

(a) to (d) A statement is placed on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 100 DUE FOR ANSWER ON 11.12.2013 BY SHRI ANANTH KUMAR REGARDING NUCLEAR POWER GENERATION

(a)&(b) The details are as under:

(i) X Five Year Plan :

Continuing Schemes scheduled for capacity addition in X Plan: New nuclear power generation capacity, proposed through continuing schemes of IX Plan and scheduled for completion in X Five Year Plan amounted to 1300 MW with the construction of Tarapur Atomic Power Station (TAPS) Units-3&4 (2X 540 MW) and Kaiga Unit-3 (220 MW). The actual addition in capacity by the end of X Plan period amounted to 1080 MW with the commissioning of two reactors at TAPS-3&4 (2X 540 MW). In addition, 100 MW capacity was augmented in the units of Madras Atomic Power Station (MAPS) Units-1&2 with their restoration to the rated capacity of 220 MW in each unit.

New Projects: The new projects, proposed in the X Plan, included Rajasthan Atomic Power Project (RAPP) Units-5&6 (2X220 MW), Prototype Fast Breeder Reactor (PFBR) (500 MW); 700 MW New Projects 1&2 (2X700 MW); Light Water Reactor (LWR) Units-3&4 (2X1000 MW); and Advanced Heavy Water Reactor (AHWR) (300 MW). The additional generation envisaged with these new projects amounted to 4640 MW. Of these proposed projects, only two projects, namely, RAPP 5&6 (First pour of concrete in September 2002) and PFBR (start of excavation in Sep 2003) amounting to 940 MW were actually launched in the X Plan.

(ii) XI Five Year Plan:

Continuing Schemes scheduled for capacity addition in XI Plan : In the XI Plan period, the addition to nuclear generation capacity was proposed as 3160 MW with the completion of Kaiga-4 (220 MW), RAPP 5&6 (2X220 MW), Kudankulam Nuclear Power Project (KKNPP) Units- 2 (2X1000 MW) and PFBR (500 MW). The actual capacity addition achieved during the period was 880 MW, with the commissioning of four reactors, namely, RAPP 5&6 (2x220 MW) at Rawatbhata and Kaiga-3&4 (2x220 MW) (including Kaiga-3 of X Plan).

New Projects: The new projects, proposed in the XI Plan, included eight indigenous Pressurised Heavy Water Reactors (PHWRs) - Kakrapar Atomic Power Project (KAPP) Units-3&4 (2X700 MW), RAPP Units-7&8 (2X700 MW), 700 MW New Project 5&6 (2X700 MW) and 700 MW New Project 7&8 (2X700 MW), ten Light Water Reactors (LWRs) with international cooperation i.e. KKNPP Units-3&4 (2X1000 MW), Jaitapur Nuclear Power Project (JNPP) Units-1&2 (2X1000 MW - later in 2009 increased to 2X1650 MW), KKNPP Units-5&6 (2X1000 MW), JNPP Units-3&4 (2X1000 MW later in 2009 increased to 2X1650 MW), LWR 11 &12 (2X1000 MW) and AHWR (300 MW). The additional generation envisaged with these new projects amounted to 15900 MW.

Of these proposed projects, only two projects, namely, KAPP Units-3&4 (2X700 MW) and RAPP Units-7&8 (2X700 MW) amounting to 2800 MW installed capacity were launched in the XI Five Year Plan, in November 2010 and July 2011, respectively, and others

were rescheduled. The main reasons for rescheduling the launch of other projects were :

- i) difficulties in establishment of fuel linkages in respect of indigenous PHWRs,
- ii) delays in finalisation of agreements in respect of LWRs proposed to be set up under international technical cooperation, and
- iii) land acquisition matters

The details of the proposed projects in X and XI Five Year Plans with their location, generation capacity, date of launch of construction, scheduled date of completion and achievements are given in Annexure.

(c) At present, one proposal for setting up of Gorakhpur Haryana Anuvidyut Pariyojana Units 1&2 (GHAVP Units 1&2) (2x700MW), at Gorakhpur in Fatehabad district in Haryana, is under consideration of the Government. The same is under process as per schedule, and there is no delay.

(d) Does not arise.