

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 1668
TO BE ANSWERED ON 13.02.2019

ATOMIC ENERGY BASED POWER

1668. SHRI K. PARASURAMAN:
SHRI ANURAG SINGH THAKUR:

Will the PRIME MINISTER be pleased to state:

- (a) the total percentage share of the atomic energy based power supply in the overall electricity generation of the country;
- (b) whether any steps are being taken to increase the atomic energy based power generation and if so, the details thereof;
- (c) the total financial implication that is incurred in generating 100 MW of electricity through atomic energy;
- (d) whether there are any plans to establish new atomic power stations, if so, the details thereof; and
- (e) the list of international agreements concluded by India on atomic energy in the last five years?

ANSWER

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

- (a) The share of atomic energy in the overall electricity generation in the country was about 2.93% in the year 2017-18.
- (b) Yes Sir. The Government has taken several measures to enhance the generation from nuclear power plants in the country. The measures include
 - (i) Securing fuel supply by conclusion of fuel supply contracts with several countries for existing and future fleet of reactors under IAEA Safeguards and augmentation of fuel supplies from domestic sources.
 - (ii) Augmenting nuclear power capacity:
 - a. Resolution of issues related to Civil Liability for Nuclear Damage (CLND) Act & Creation of Indian Nuclear Insurance Pool (INIP).
 - b. Accord of administrative approval and financial sanction of - ten (10) indigenous 700 MW Pressurized Heavy Water Reactors

(PHWRs) to be set up in fleet mode & two (02) units of Light Water Reactors (LWRs) to be set up in cooperation with Russian Federation.

- c. Amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects.
 - d. Enhanced project monitoring to identify and address the issues affecting project progress at multiple levels coupled with close monitoring through Pro-Active Governance And Timely Implementation “PRAGATI” platform.
- (c) The completion cost of Indigenous 700 MW PHWR in the year 2017 is about Rs. 15 crore per MW.
- (d) Yes Sir. New nuclear power capacity is planned to be added in order to increase the share of generation of electricity through atomic energy. In this connection, nine reactors with a capacity of 6700 MW are under construction. The details are as follows:

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

In addition, the Government has accorded administrative approval and financial sanction for setting up 12 more reactors with a capacity of 9000 MW. The details are:

Location & State	Project	Capacity(MW)
Chutka, Madhya Pradesh	Chutka -1&2	2 X 700
Kaiga, Karnataka	Kaiga - 5&6	2 X 700
Mahi Banswara, Rajasthan	Mahi Banswara - 1&2	2 X 700
Gorakhpur, Haryana	GHAVP - 3&4	2 X 700
Mahi Banswara, Rajasthan	Mahi Banswara - 3&4	2 X 700
Kudankulam, Tamil Nadu	KKNPP 5&6	2 X 1000

On progressive completion of the projects under construction and accorded sanction, the installed nuclear power capacity will reach 22480 MW by 2031.

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

Location & State	Site	Capacity (MW)
Jaitapur, Maharashtra	Jaitapur, Units- 1 to 6	6 x 1650
Kovvada, Andhra Pradesh	Kovvada, Units- 1 to 6	6 x 1208
Chhaya Mithi Viridi, Gujarat	Chhaya Mithi Viridi, Units- 1 to 6	6 x 1000*
Haripur, West Bengal	Haripur, Units – 1 to 6	6 x 1000*
Bhimpur, Madhya Pradesh	Bhimpur, Units- 1 to 4	4 X 700

**Nominal Capacity*

(e) The list of Inter-Governmental Agreements concluded by India on atomic energy in the last five years are given below:

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|-----|----------------|------------|
| (a) | Australia | 05.09.2014 |
| (b) | Sri Lanka | 16.02.2015 |
| (c) | United Kingdom | 13.11.2015 |
| (d) | Japan | 11.11.2016 |
| (e) | Vietnam | 09.12.2016 |
| (f) | Bangladesh | 08.04.2017 |
