Storage of radioactive fuel

†1417. MS. SAROJ PANDEY: Will the PRIME MINISTER be pleased to state:

(a) the details of measures taken by Government to store radioactive fuel used in nuclear power plants; and

(b) the details of places where these stores have been set up in the country?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) and (b) All the fuel storage facilities are located within Nuclear Fuel Complex (NFC) premises and adequate measures are implemented for their safety and security, as per International Atomic Energy Agency (IAEA) document on "The physical protection of nuclear material and nuclear facilities (INFCIRC/225 rev.4)". Only authorized persons are allowed access to these facilities and material accounting is being maintained by authorised agency of the facility.

The scheme adopted for storage of the valuable radioactive spent (used) fuel at a nuclear power plant is two-fold. The first place of storing spent fuel is located within the reactor building/service building, generally known as the spent fuel storage pool/ bay and the other is the storage facility located away from the reactor called the Away From Reactor' (AFR) Spent Fuel Storage Facility, within the plant premises. The spent fuel is shifted to the AFR when the capacity of the spent fuel storage pool/bay is utilised. The AFR facility is set up at a site when the need arises.

All nuclear power plants have a spent fuel storage pool/bay and presently, AFR facilities are operational at Tarapur, Maharashtra and Rawatbhata, Rajasthan sites.

Setting up of indigenous Pressurised Heavy Water Reactors

†1418. SHRI SAMBHAJI CHHATRAPATI:
DR. KIRODI LAL MEENA:

Will the PRIME MINISTER be pleased to state:

(a) whether Government has decided to set up ten indigenous Pressurised Heavy Water Reactors with a total installed capacity of 7000 Megawatt in the country during the year 2017-18;

(b) if so, the details thereof along with Memorandum of Understanding (MoUs) signed till date to set up these reactors;

†Original notice of the question was received in Hindi.

(c) the details of sites identified for setting up these reactors; and

(d) the current status of the progress in this regard and by when these reactors would start generating consumable clean energy?

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

(b) The Government in June-2017 accorded administrative approval and financial sanction for setting up ten indigenous Pressurised Heavy Water Reactors (PHWRs) of 700 MW each in fleet mode. These reactors of indigenous technology are being set up by Nuclear Power Corporation of India Limited (NPCIL), a wholly owned Public Sector Undertaking (PSU) of Government of India under the administrative control of Department of Atomic Energy (DAE).

(c) These reactors are proposed to be set up at the following locations:–

Location and State	Project	Capacity (MW)
Chutka, Madhya Pradesh	Chutka-1 and 2	2X700
Kaiga, Karnataka	Kaiga - 5 and 6	2X700
Mahi Banswara, Rajasthan	Mahi Banswara - 1 and 2	2X700
Gorakhpur, Haryana	GHAVP-3 and 4	2X700
Mahi Banswara, Rajasthan	Mahi Banswara - 3 and 4	2X700

(d) Currently, pre-project activities comprising of Land Acquisition, Rehabilitation and Resettlement, Environmental Clearance, etc. are in progress at various stages at these sites. Land is available at Kaiga and Gorakhpur sites and land acquisition is completed at Chutka site. It is at an advanced stage at Mahi Banswara site. Environmental Clearance is accorded for Chutka 1 and 2 and GHAVP 3 and 4 projects. In respect of Kaiga and Mahi-Banswara sites, public hearing has been completed as a part of the process of environmental clearance.

In addition, procurement of long manufacturing cycle equipment, human resource planning etc. have been initiated. These reactors are expected to be completed progressively by 2031.