(b) and (c) There is a concrete and comprehensive policy for disposal of nuclear waste in the country. Radioactive waste disposal policy bears emphasis on waste volume minimization, recycle and reuse and is at par with international practices. As a waste management philosophy, no waste is released/ disposed to the environment unless the same is cleared, exempted or excluded from regulations. Disposal system is designed on multi-barrier principle for ensuring effective containment of radioactivity.

Proposal to set up neutrino observatory in Andhra Pradesh

- 165. SHRI V. VIJAYASAI REDDY: Will the PRIME MINISTER be pleased to stater
- whether it is a fact that the India-based Neutrino Observatory is proposed (a) to be located at Kothapalem village near Narsipatnam in Visakhapatnam district of Andhra Pradesh;
 - (b) if so, the details of aims and objectives of this project;
- whether this observatory is proposed to be located at an environmentally fragile Eastern Ghats, if so/Government's reaction thereto; and
 - (d) whether this Department is planning to go ahead in this regard?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) No, Sir.

- (b) Not applicable.
- (c) Not applicable.
- Not applicable. (d)

Setting up of ten indigenous nuclear power reactors

- 166. SHRI SAMBHAJI CHHATRAPATI: Will the PRIME MINISTER be pleased to state:
- whether Government has taken a decision in 2017 to set up ten Indigenous (a) Pressuried Heavy Water Reactors with a-total installed capacity of 7000 MW in the country;
- (b) if so, the details thereof including MoUs signed till date to set up the reactors;

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- (c) the details of locations identified therefor; and
- (d) what is the current status of progress and by when these reactors would start generating clean energy for use?

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

(d) Pre-project activities comprising of Land Acquisition, Rehabilitation & 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 at an advanced stage at Chutka and Mahi Banswara sites. Environmental Clearance is accorded for Chutka 1&2 and GHAVP 3&4 projects. For other sites, the process of Environmental Clearance is in various stages. In addition, procurement of long manufacturing cycle equipment, human resource planning etc. have been initiated.

With the progressive completion of projects under construction (including 500 MW Prototype Fast Breeder Reactor (PFBR), being implemented by Bharatiya Nabhikiya Vidyut Nigam Limited [BHAVINI] and projects sanctioned (including these ten PHWRs), the total nuclear power capacity will reach 22480 MW by the year 2031.